

NATION'S SCHOOLS



MARCH

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Teacher Education: Early

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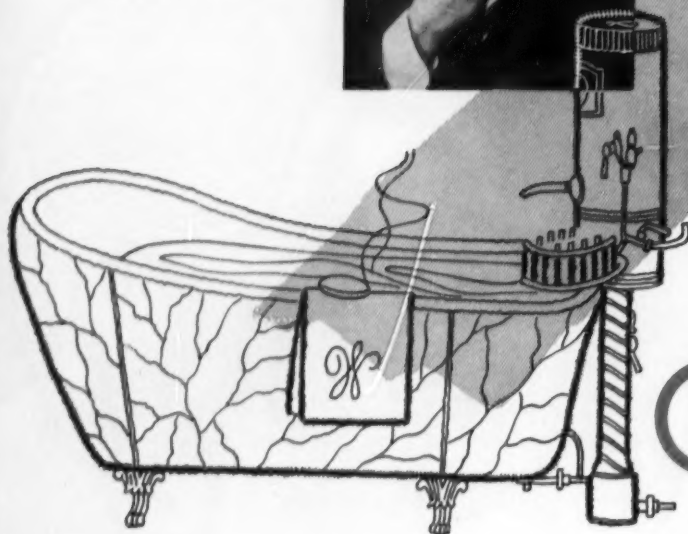
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THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION



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VOLUME 55, NO. 3

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AMONG THE AUTHORS



H. M. Hamlin

"Are We Returning to Private Education?" asks H. M. HAMLIN (p. 63). Dr. Hamlin has been chairman of the division of agricultural education, College of Education, University of Illinois, since 1938. Previously he had spent three years as a high school teacher in Minnesota and 18 years as a member of the agricultural education staff of Iowa State College. Dr. Hamlin is the author of three books: "Agricultural Education in Community Schools," "Citizens' Committees in the Public Schools," and "A Citizens' Guide to the Study of Public Education."

Next April AROL BURNS will complete his 30th year as an expert on school real estate for Los Angeles (p. 86). After attending the University of Southern California, Mr. Burns worked several years for an oil company before joining the Los Angeles schools' real estate department. He was named director of the department in 1933. For hobbies, Mr. Burns concentrates on sports and amateur photography. As real estate director for the largest school district (in area) in America, Mr. Burns supervises the purchase of hundreds of school sites. . . . VERNON D. MACPHERSON is a general assignment reporter-writer for the *Los Angeles Mirror-News*. For nine years, as a staff man on several Los Angeles dailies, he has kept one eye on the city and county schools. Mr. MacPherson attended 13 schools in Wyoming, California and Massachusetts before being graduated from Chaffey High School in Ontario, Calif., in 1937. His B.A. degree came from the University of Southern California.



George E. Mills

With GEORGE E. MILLS as their proxy, readers of the Schoolhouse Planning portfolio are permitted to sit in with committees that planned the educational specifications for Dearborn's new \$4,700,000 high school (p. 68). Mr. Mills is assistant superintendent at Dearborn, Mich., in charge of the division of senior high schools and community colleges. Before going to Dearborn in 1951, he had been a lecturer in education at the University of Michigan (from which he received his M.A. degree in 1941) and a consultant in citizenship education from Michigan's state department of public instruction. From 1947 to 1949 he was supervisor of curriculum and audio-visual education at Kalamazoo; previously he had been assistant professor of education at Western Michigan College of Education.

SUPT. EDMUND H. THORNE describes (p. 51) the career salary plan for teachers at West Hartford, Conn. Dr. Thorne has been superintendent at West Hartford since

1947; before that he was a teacher and high school principal at Comstock Park, Mich.; superintendent at South Lyon and Rockford, Mich.; associate professor of education at Michigan State College, and assistant superintendent at Lansing, Mich.

Summer school classes for children who need extra help are a success at Oceanside, N.Y., according to THOMAS J. KILROY (p. 80). Mr. Kilroy is an elementary school principal, principal of the summer program, and coordinator of special services (for atypical children) at Oceanside. He formerly was a teacher at Acidalia, North Branch, and Jeffersonville, N.Y. Mr. Kilroy's interests are varied: working with cub scouts and boy scouts, writing poetry, and fishing.



Thomas J. Kilroy

NORMAN BRUCE SIGBAND ("Make Your Public Relations Letter Perfect," p. 65) is interested in written communications of all types; in fact, he serves as a consultant to industry on business correspondence and reports. Last year, under a grant from the Kellogg Foundation, he investigated the effectiveness of communications sent by a junior college to its community. He is associate professor of education at De Paul University, Chicago.

One principal making good use of the talents of residents in his community is GEORGE W. BROWN (p. 53). Mr. Brown has been associated with the schools of Mamaroneck, N.Y., since 1934, as a teacher, dean of boys, principal of the central school, and, since 1954, principal of the junior high school. From 1943 to 1946 Mr. Brown served in the navy. "Having crossed the equator and the 180th meridian on May 8, 1945," he reports, "I am now a Shellback of the Ancient Order of the Deep and have also been admitted by the Golden Dragon into the Silent Mysteries of the East, which adds up to a pretty rough initiation on a navy ship."

SUPT. WILLIAM J. WOODHAM Jr. works with school lunch personnel, teachers and parents to plan the lunch programs in the schools of Escambia County, Pensacola, Fla. (p. 98). After nine years in Escambia County (1936 to 1945) as assistant principal and coach and junior high school principal, Dr. Woodham was named supervising principal at St. Cloud, Fla. From 1948 to 1951 he attended the University of Florida, where he received his Ed.D. After two years as director of instruction at Starke, Fla., he returned to Escambia County as superintendent in 1953.



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OPINION POLL

Criticism of Schools on Downswing; Superintendents Credit Better Public Relations, Organization of Citizen Committees

A nationwide sampling of superintendents' opinions by The Nation's Schools

ABOUT half of the superintendents in the country see no difference between the amount of public criticism of schools today and the amount a year ago. But among those who do note some change, the judgment is 3 to 1 that criticism is less than it was a year ago.

Of course, local conditions are reflected in the superintendents' answers, but some of them reflect national trends, too.

There is no agreement on what the effect has been of the articles on education that have appeared in the mass circulation magazines. Some say they help; some say they hurt. Some superintendents feel that the critical articles haven't convinced anyone that schools are doing a poor job but rather have encouraged people to study their schools. Such articles, they say, have been all to the good. Other superintendents disagree with this analysis, saying instead that people are wont to believe the worst at times and many of the articles such as those appearing in *Collier's* have given the armchair critics a good boost.

A number of superintendents said they detected a change in the kind and amount of criticisms of public

schools about a year and a half ago. To what do they attribute the change? Most of them give credit to renewed efforts to create effective relations with the local public. This was the reason given far more times than any other by the many superintendents who said, "There's less criticism than there was a year ago." They referred to cooperation on the part of local press and radio and the success of direct communication with parents and other lay citizens.

CREDIT GIVEN

Other credit was given to the work of local P.T.A. groups and to the formation of citizens committees. One superintendent said, "About a year ago I dropped just about everything else and devoted my time to a program of public relations. It paid off."

One superintendent described what he called "an ugly situation" in his town about two years ago and said that everything has now about smoothed out because of improved school-home relationships which brought parents and friends into the school circle. "Our local press gave us lots of space to write up school activities. Principals and teachers got into every possible organization in town

and took offices and did committee work. We answered the critics and asked them for *more* constructive criticism, not *less*. Of course, we still have a few yet to win over."

One unique explanation of the decrease in criticism was this one: "Criticism by crackpots has been a good thing; it has caused legitimate criticism to be subdued because people didn't want to be identified with the fringe element." Some superintendents, however, failed to agree with this analysis of the effect of crackpots. They reported that criticism is more pronounced today in their local communities than it was a year ago. While many of them point to organized pressure groups within the local community, most of them say their trouble is going to come from increased demand for more funds. It's more money, more money for schools, in every town in America, and at least 11 per cent of the superintendents participating in this nationwide poll are looking for foul weather ahead.

Some say that state finance programs which have forced acceptance of state equalization of tax rates and other such statewide measures have added to the likelihood of explosions. Others point to the natural backwash of resentment that accompanies state reorganization and consolidation of school districts. As one superintendent grumbled: "Our people don't want to lose the one-room school out here. Our people love to be ornery, obstinate and vocal."

CRITICISMS CONTINUE

Although many reasons for criticisms were given, most of them related either to money or to teaching methods. "Too liberal," "too many fads and frills," "children are pampered nowadays"—these criticisms superintendents report they are still getting. Many of the criticisms will undoubtedly continue. As one superintendent pointed out, "It's something we might as well relax and live with. There will always be trivial fault-finding, but most of the people in America have been reawakened in the last two years both to the crisis and to the promise of our public schools."

It may still be too early to say—and nobody would want to say, anyway, if it would create any complacency—but perhaps the public school crisis at mid-century is past. It may be that we'll look back on 1948-53 as the half decade when the ice got pretty thin, boy, but we made it.

In your own community do you find:

More criticism of the school program by laymen than a year ago?	11%
Less criticism of the school program by laymen than a year ago?	37%
No observable difference?	52%

If a change one way or the other has occurred, do you have any explanation? (What criticisms are raised and by what groups?)

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QUESTIONS AND ANSWERS

Negro Teachers

The problem of the Negro teacher in the South is a major concern in efforts toward desegregation. How many Negro teachers are employed today in states that have been racially integrated through the years?

In the 31 so-called nonsegregated states there are only 10,248 Negro

teachers as compared with 722,487 white teachers. This is a ratio of one Negro to each 72 white teachers.

On the other hand, in the seven southern and border states and the District of Columbia one teacher out of five is Negro.

In the state of Maine there are three Negro teachers compared with 7483

white teachers; in Montana, two compared with 5601; in Massachusetts, 110 compared with 36,553; in Indiana, 680 compared with 27,290; in California, 923 compared with 73,925; in New Jersey, 759 compared with 34,118; in New York, 1693 compared with 101,387, and in Illinois, 1961 compared with 55,712.

The 17 southern and border states employ seven times as many Negro teachers as all of the 31 so-called nonsegregated states put together.

Saving on Income Tax

How much will retired teachers save under the new income tax bill?

Teachers under 65 whose retirement income is \$1000 a year formerly had to pay a \$60 tax. Now they will pay no tax at all. (Neither will those over 65, of course.)

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Teachers under 65 whose retirement income is \$2200 had to pay a tax of \$276. Now they will pay a tax of \$36—saving \$240. Teachers over 65 had to pay a tax of \$156. Now they will pay no tax at all.

Teachers under 65 whose retirement income is \$2800 had to pay a tax of \$384. Now they will pay \$144, saving \$240. Teachers over 65 had to pay \$264 but will now pay \$24, saving \$240.—H.M.

Driver Education

In driver education does it make any difference if students are taught first in the conventional shift car or in an automatic shift car?

Most authorities in driver education agree that both types should be available for instructional use. As would be expected, the use of automatic shift cars is increasing.

The American Automobile Association reports a recent research survey conducted in the high school driver education class at Hamilton, Ohio. Two classes of students were studied—one starting in the automatic shift car and the other starting in a conventional shift car. Both groups changed in the middle of the semester.

Results of the survey showed a tendency for the group that started in the automatic shift car first to be more successful, but this finding was not statistically significant.—H.M.

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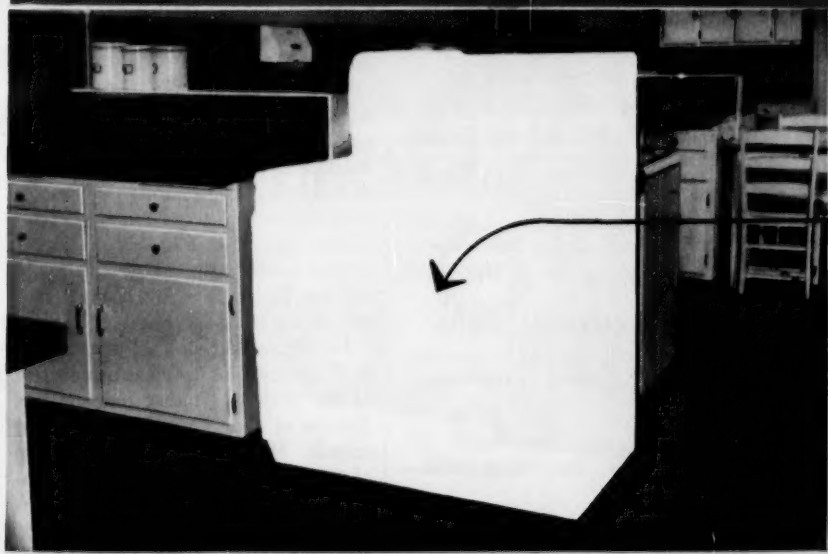
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READER OPINION

Drs. Read and Hammond Worked on January Article

Sirs:

Much of the work on the article "Teachers Study How Others Worship" (January 1955, p. 53) was done by Gerald Read and Granville S. Hammond. I would like your readers to know about the part they played in this inservice education project in Warren.

Dr. Read, professor of education at Kent State University, has been directing workshops and inservice educational projects on the study of moral and spiritual education in the public schools for the past several years. In some cases these projects have been financed by the Danforth Foundation of St. Louis. At other times the projects were under the direction of Kent State University. Dr. Read served as a liaison contact between Kent State University and the Warren public schools during the 11 weeks of the inservice project.

Dr. Hammond, now superintendent at Alliance, Ohio, served as coordinator of the project. At that time he was director of instruction in the Warren schools. He was assisted by a group of Warren teachers. The local education associations and many citizens were involved in the total project. Representatives of the School Community Development Study of the Kellogg Foundation observed the inservice training seminar as a part of their study in school administration. —PAUL A. MILLER, *superintendent of schools, Syracuse, N.Y.; formerly superintendent, Warren, Ohio.*

N.A.M. Official Comments on Superintendent's Worth

Sirs:

The February article, "Society Undervalues School Administration," provides a doubtful answer to the question, "How much is a superintendent worth?" The five western universities which furnished the statistical data may not be representative of the national norm in respect to cost of their professional training in the four fields.

What the businessman and industrialist want is the best trained doctor, dentist, lawyer and school administrator that colleges can produce. Each is essential to the continuation and improvement of our forward moving

(Continued on Page 130)

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Roving Reporter

Play Leaders for Primary Children • Lawyers and Students Conduct Trial in
High School • Special School Tour for Fathers • Science Can Be Exciting

TO MEET THE PROBLEM of a rising rate of accidents on the playground, Andersen School, Chicago, developed a plan of having upper grade boys and girls serve as "play leaders" for primary children.

Four play leaders are assigned to each kindergarten and first and second grade room—two for the girls and two for the boys. They conduct the classes to and from their rooms and organize the youngsters' play at recess time.

Louis Gratch, physical education teacher, trains members of a selected sixth grade class in the arts of keeping young pupils in order and in directing a wide variety of simple games and stunts. For the training, and to give them an opportunity to discuss problems, the sixth graders have an extra gymnasium period each week.

After two years a new group of play leaders is trained, with the retiring leaders helping to teach their successors.

Principal Edna W. Simmons says that the plan is most successful. Playground fighting has been greatly reduced, and the play leaders have gained notably in character development.

BECAUSE THEY ARE WORKING, fathers miss out on many school activities for parents. For this reason Travell School, Ridgewood, N.J., planned an All Dads' Tour of the school on Lincoln's Birthday.

The guide was Principal Samuel Magio. Before the tour began there was a discussion that acquainted the visitors with the things they would see; after it ended the fathers discussed what they had seen. The tour was planned to show the dads the growth in learning that takes place from one grade to another.

SCIENCE IS EXCITING to junior high pupils in the campus school of Wisconsin State College, La Crosse.

When the boys and girls are in fifth and sixth grades they observe

junior high pupils' work and begin making plans for their own projects. Each seventh, eighth and ninth grader selects a project, on the basis of his skills and interests, early in the fall. In the past these have included such diverse subjects as the effects of living indoors on rabbits, taxidermy, roof protection, effects of types of soaps and various water temperatures on textiles, the identification of animal tracks, and the manufacture of cosmetics.

Kenneth Fish, the science teacher, prepares a list from which pupils may make their selections. Often their parents' or their own interests lead to different suggestions. An optometrist's son made a telescope. A doctor's son studied the human body. Another doctor's daughter studied the human hand. She had severed a nerve in an accident some years before and became interested in the processes by which her hand was restored to active use.

One able but shy boy gained status and considerable respect from his classmates when he developed an electronic organ on which another boy played a recognizable version of "Dragnet." The organ, which had 20 notes and four arrangements, used a vacuum tube as an oscillator instead of a reed. The designer had to learn the history of organ construction as well as present requirements for making an organ.

Frequently a demonstration to the class includes the log or progress report the pupil made as he did his research as well as a complete notebook in which he has outlined his plan, placed pictures relevant to his work, and made diagrams.

The young scientists learn to share their work with others and to respect the work of others. They get great satisfaction from a job well done. In the late spring the projects are put on display; the pupils expect each one to have put interest and sincere effort into the year's work and criticize anyone who hasn't. The greatest insult

that can be offered anyone in the science class is "Did you whip this up overnight?"—the scornful comment made when a display doesn't seem to show much real achievement.

The junior high pupils take field trips which frequently stimulate interest in their science projects. Classes have visited an electric plant, and a sewage disposal plant, have studied animal tracks in the snow, and have observed the effects of soil erosion. In 1954 the eighth graders went to Chicago, where they visited as many places of scientific interest—from stockyards to museums—as they could manage in three days.

A TRIAL, complete with lawyers, a judge, a photographer, and student plaintiff, defendant, witnesses and jurors, was held in the high school at Sulphur Springs, Ark.

To help her senior civics class understand court procedures, Mrs. B. E. Keith asked two practicing attorneys, a former county judge, a state representative (also a lawyer), and a photographer to spend a few hours at the school creating a courtroom atmosphere. The trial was held in the school auditorium, with junior and senior high school students as spectators.

From 24 prospective student jurors 18 were chosen to be questioned by the judge and the attorneys for the plaintiff and the defendant. Once the jury had been selected, witnesses were examined and cross-examined while flash bulbs exploded as the photographer took pictures.

After the judge (one of the attorneys) had given his instructions, the jury deliberated and reached its decision, in favor of the plaintiff. The former county judge acted as clerk of the court.

When the trial had ended, the four attorneys agreed that this type of "class" should be held in every public high school at least once a year to teach students about court procedures.



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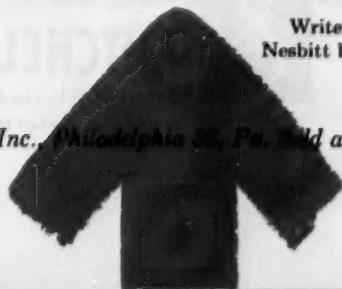
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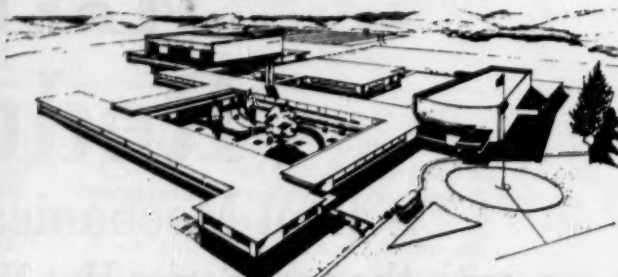
MITCHELL Lighting chosen for the Monroeville Junior High School



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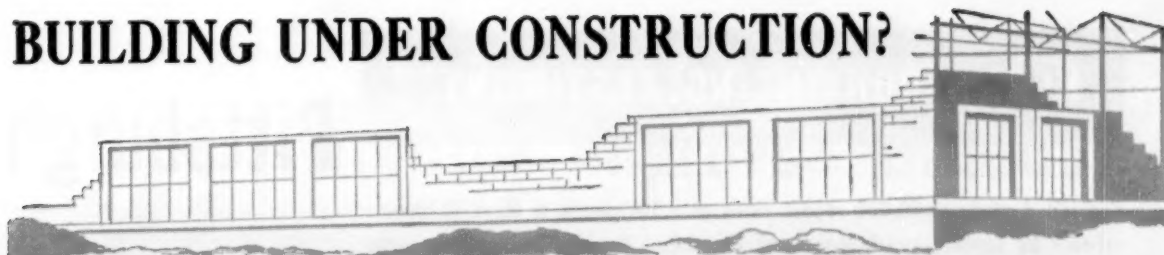
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Three schools were included in this experiment. One school was not repainted during this test and served as the control school. Another was repainted at the end of the first year with conventional colors. The third was repainted according to COLOR DYNAMICS. Approximately 20,000 report cards of 2,500 pupils were microfilmed and analyzed during the test.

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ment in behavior and scholastic traits in the school painted the COLOR DYNAMICS way. Kindergarten pupils improved 33.9 per cent over the preceding year. Next best was improvement of 7.3 per cent in the school conventionally repainted. In Grades III to VI, pupils recorded an improvement of 8.9 per cent in the COLOR DYNAMICS school. Next best was improvement of one-half of one per cent in the conventionally redecorated school.

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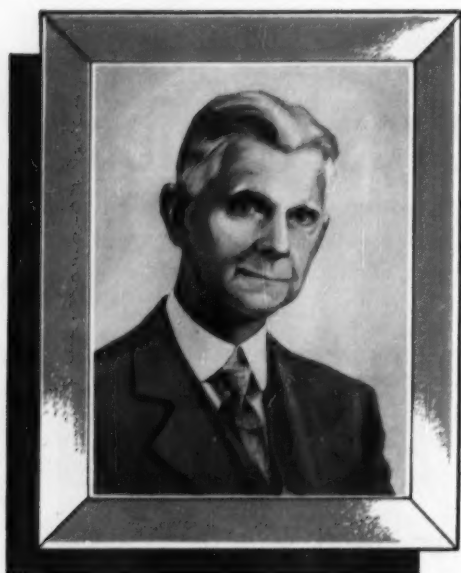
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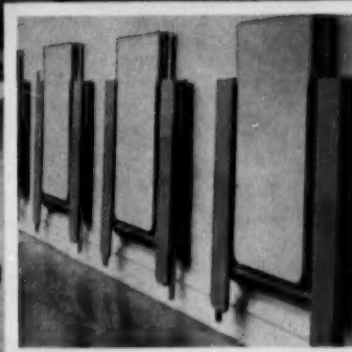
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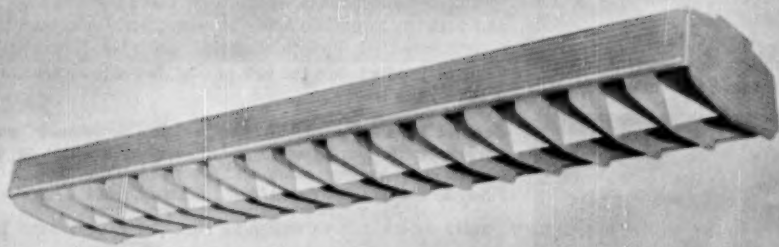
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Give Children the Protection of these HUNTINGTON Products in Schools, Hospitals, Churches

Modern teaching methods . . . group activities . . . therapeutic training . . . often require that children sit or lie on the floor. It can be wholesome and healthful if those floors are warm *and clean*.

New heating systems provide the warmth and eliminate drafts, but only you, with regular, thorough maintenance, can be

sure the floors are as clean as they ought to be. Cleaning products have progressed with the times. We have the cleaners and waxes necessary to keep your floors clean, attractive and safe . . . and our "know how" in maintenance methods can be yours for the asking. If your cleaning program needs to be modernized to fit your teaching methods, write us for help.

FLOOR-SAN • Universal Cleaner
KOREX • Germicidal Cleaner
SPAL Concentrated Detergent
NEO-SHINE • Concentrated Wax
COSMOLITE • Anti-Slip Wax
HUNTOLENE • Antiseptic Floor Maintainer

HUNTINGTON  LABORATORIES

HUNTINGTON, INDIANA

PHILADELPHIA 35, PA.

TORONTO 2, ONTARIO



"Sure you can buy cheaper lockers, but you can't buy any made better than Medart!"



LOCKERS in all standard types and sizes, recessed and free-standing

BASKET SHELVING, permanent and portable, in all popular sizes.

Ask for Catalog

MEDART STEEL LOCKERS

Equipped with a new type locking mechanism—
Positive-Locking—Pre-Latching—Fool-Proof
and Pilfer-Proof.

The **ONLY** locker with all the perfected features
essential for maximum protection, long service
and minimum maintenance.

SPECIFY the best, then INSIST on it!

FRED MEDART PRODUCTS CO., INC.

3532 DeKalb St.

St. Louis 18, Mo.



American... the No. 1 floor introduces the No. 1

**new *Floor-King* maintenance
machines...two complete lines...
engineered for all floors and rugs...
priced to fit every budget!**

Now—for the first time—maintenance machines designed to supply *every* requirement of *every* user in hospitals, schools, churches, hotels, motels, restaurants, department stores, office buildings, institutions, and industrial plants—because *you* have told us in countless research studies exactly what you need! This has resulted in *all-new design... all-new performance... all-new features* in this great new American line that's going to set the standard for years to come!

**American Floor-King
STANDARD
all-new 14", 16", 19"**

new handling ease

all jobs...all budgets

**easy-on, easy-off
brushes**

**adjustable—
detachable handle**

quiet operation

**warehouse,
service centers**

The new Floor-King will wax, scrub, polish or steel wool any floor... even grind concrete or terrazzo with mere finger-tip guidance... a new conception of effortless performance—resulting from perfect balance of motor over brush... plus vertical mounting of motor with new gear-saving direct drive.

Two complete lines meet every maintenance need... fit every budget... and the motors can be interchanged! The all-new Standard ranges from $\frac{1}{4}$ to 1 H.P. in 14", 16" and 19" sizes... the all-new Heavy Duty has added power for everyday jobs and special ease in concrete grinding, sanding, etc.; motors range from $\frac{3}{4}$ to $1\frac{1}{2}$ H.P. in 14", 16", 19" and 23" brush sizes.

Every American-tested attachment can be put on or taken off in seconds *every time*—no tools are necessary.

Handle adjusts instantly to height best for you... detaches in seconds for convenient storage, easy transportation.

No need to jangle nerves of operator or others in the room. This new American runs with a new kind of *quiet!*

Nation-wide warehouses for immediate delivery plus factory-trained service experts near you in 40 principal cities are ready to help you keep your American Machines in tip-top condition with minimum time out if service is needed.



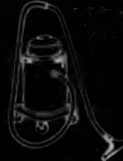
ALM 13



Water
Pick-Up



Commercial-
Industrial
Vacuums



Solution Tank
with Shower
Feed Brush



performance proved machines... nation-wide service... established 1903

machine company maintenance machine

Scrubbing

Buffing

Polishing-Waxing

Carpet
Shampooing,
Wet or Dry

Steel Wooling

Disc Sanding

Terrazzo
Grinding,
Polishing

**American Floor-King
HEAVY DUTY
all-new 14", 16", 19", 23"**

for demonstration on your floors!

There's so much to tell you and show you about this wonderful new line, we want you to have a *personal* and *private* demonstration of these machines on your own floor, at your convenience. Just write or call us—we'll have an American Representative get in touch with you at once to arrange this demonstration entirely without cost or obligation to you. We sincerely hope you'll write or call *today!*

the American floor surfacing machine company

548 South St. Clair St., Toledo 3, Ohio



Weldwood Fire* and Stay-Strate® Doors offer unusual beauty, durability and an unequalled lifetime guarantee

Beautiful Weldwood Fire and Stay-Strate Doors end forever the problems of door warping, shrinking and sagging. They keep their natural good looks and working efficiency so long and so well that United States Plywood guarantees these doors *for the life of your school.*

Here's why Weldwood Fire and Stay-Strate Doors are so superior:

Fire-resistant Weldrok® core in both doors is an incombustible mineral material that's light-weight, stable and extremely strong. This core is an exclusive Weldwood feature.

Weldwood Fire Doors are edge-banded with fire-proofed hardwood for additional protection. Fire Doors are labeled by Underwriters' Laboratories for class "B" (vertical shaft) and class "C" (room and corridor partition) openings. Weldrok's extremely low heat transmission factor prevents fires from spreading to the other side of the door. During a one-hour fire test, a Weldwood Fire Door was subjected to 1700°F; the highest temperature registered one foot from the other side of the door was only 102°F!

Extreme durability of Weldwood Fire Door was

proved by test of Underwriters' Laboratories that mechanically opened and closed the door 200,000 times. The same door was then slammed shut with great force 100,000 times. The door was unaffected and still operated perfectly!

Maximum dimensional stability. A Weldwood Stay-Strate Door in daily operation has been subjected to a relative humidity of 90-95% on one side and exposed to all the natural elements of the weather on the other; it operates as efficiently as the day it was installed *over 5 years ago.*

Beautiful standard thickness veneers 1/28" thick mean superior door construction, better performance, longer service. Lovely oak, natural birch, glowing walnut and blond Korina® are some of the many fine hardwood faces available.

Guaranteed for life. Each Weldwood Fire and Stay-Strate Door is *guaranteed for the life of the building* in which it is installed; this unique guarantee covers *all* costs of replacement, including labor.

Send coupon for more details or visit your lumber dealer or any of the 73 U. S. Plywood or U.S.-Mengel Plywoods showrooms in principal cities.

*PATENT NO. 2,000,000

FOR WOODWORKING SHOPS. Have your shop teacher investigate new full-color slide film entitled "Joinery." Shows all major wood-working joints and outlines an entire year's program, illustrating 6 complete projects. For details, write Dept. SP.



ARCH.—EMILIO DI RIZZO

BIRCH Weldwood Fire Door in the Hamilton School, Mount Vernon, N. Y. is also a very effective noise barrier—it cuts sound level by about 31 decibels.



ARCH.—SHERWOOD, MILLS & SMITH

UNUSUAL DIVIDED birch Weldwood Stay-Strate Door covers dumb-waiter (bottom) and mechanism (top) in South Kent School, South Kent, Conn.



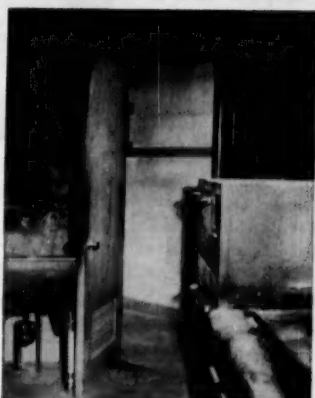
ARCH.—EMIL A. SCHWIDLIN

WELDROK CORE in these birch Weldwood Stay-Strate Doors at Lake Hiawatha School, Troy Hills, N. Y. also gives 25% greater insulation than ordinary solid core.



ARCH.—ROBERT L. WEED AND MARION HANLEY

BEAUTIFUL UNSELECTED BIRCH Weldwood Stay-Strate Doors are used in the University of Miami dormitory, Miami, Florida. Doors never need painting; maintenance consists of occasional waxing.



ARCH.—DUANE LYMAN

HERE'S PROOF of Weldwood fire protection. This is a Weldwood Stay-Strate Door after a fire at the Sodus School in Sodus, N. Y. This door actually stopped the fire from spreading beyond the room . . . an impressive tribute to the door's incombustible core.



Weldwood® Doors

UNITED STATES PLYWOOD CORPORATION

World's Largest Plywood Organization

and U. S.-Mangel Plywoods, Inc., Louisville, Kentucky

UNITED STATES PLYWOOD CORPORATION

NS-3

Weldwood Building
55 West 44th Street, New York 36, N. Y.

Please send me brochures that give all the details on the unusual advantages of Weldwood Fire and Stay-Strate Doors, including the unique lifetime guarantee.

Name

Position in school, school board or other

Address

City State



SOMETIMES Safety CAN BE MEASURED IN SECONDS—

**Make sure your school buses
can stop in time !**

**Insist on Bendix-Westinghouse Air Brakes —
the most dependable, most powerful brakes made**

WHY AIR BRAKES? The answer, of course, can be stated in one word—*safety*. Look at it this way. The greatest assurance of safety in school bus operation is a braking system powerful and dependable enough to meet any emergency. *Air Brakes* deliver more power, faster and surer than any other type of brakes available. *Proof of this can be found in the fact that virtually all of the 102,000 commercial buses operating in 1953 were Air Brake equipped.* Commercial bus operators can't take chances on passenger safety—they demand the world's safest power-to-stop!

HOW TO GET THEM. It's simple. First, if you are buying new buses and are asking for competitive bids, insist that *all* bids submitted include Bendix-Westinghouse *Air Brake* equipment. This way, the buses you ultimately choose will come from the factory *Air Brake* equipped. Secondly, you can modernize your present buses with handy field conversion kits—there's one designed for every make and model bus. Just call your Bendix-Westinghouse Distributor and he will make all arrangements—you'll find him listed in the yellow pages of your telephone directory.



**WRITE FOR FREE
INFORMATIVE BOOKLET**

Here's the complete story on how much *Air Brakes* can contribute to school bus safety. Write to the factory today.

THE BEST BRAKE IS AIR . . . THE BEST AIR BRAKE IS

Bendix-Westinghouse

BENDIX-WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY

General Offices & Factory — Elyria, Ohio

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REG. U.S. PAT. OFF.



If there's Du Pont Ludox[®] in the wax



Glistening floors can still be *safe* floors—if the floor wax contains "Ludox" colloidal silica, Du Pont's anti-slip ingredient.

The tiny particles of transparent "Ludox" form a network throughout the wax film (see diagram). Shifting of the wax particles underfoot is thereby reduced, absorbing much of the foot's forward-moving energy. The result—added traction and added *safety* underfoot!

Waxes properly formulated with "Ludox" retain their gloss, water resistance, and leveling properties. Have your maintenance man try a floor wax containing "Ludox." You'll see how *safe* beautiful floors can be.

E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Dept., Wilmington 98, Del. In Canada: Du Pont Company of Canada Limited, Box 660, Montreal.



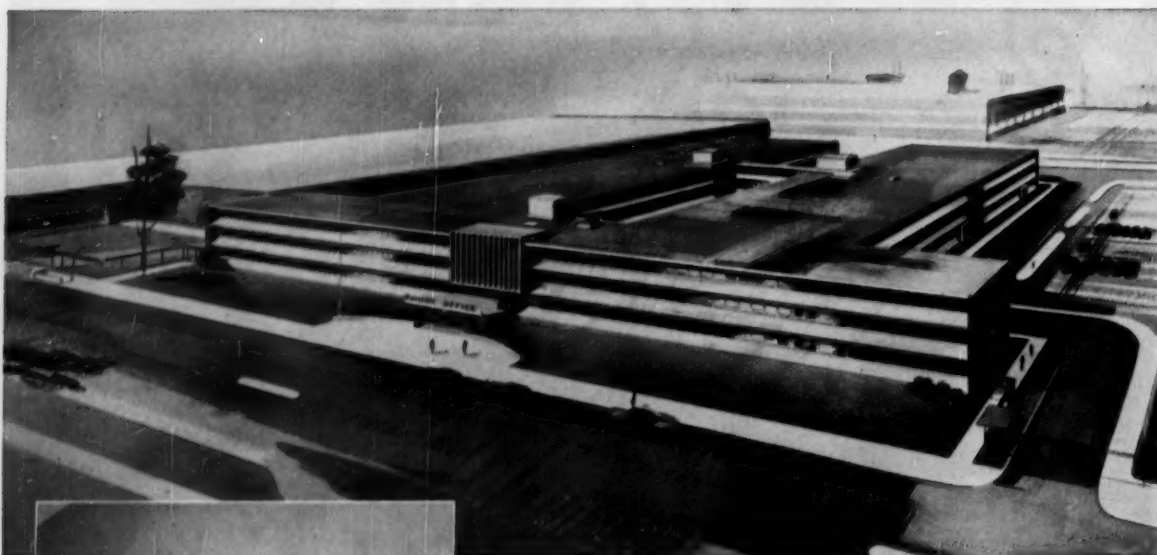
BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

For safety underfoot, specify floor wax made with

LUDOX[®]

Colloidal Silica

Enhancing the Modern Beauty of this new
FORD Motor Co. Office...
the Modern Door Closer...NORTON "INADOR"



See how unobtrusively the "Inador" installs, as shown here on an interior door of Ford's new Rouge Office Building, Dearborn, Mich. Eberle M. Smith Associates, Inc., Dearborn, Mich. are the architects and Long Construction Company, Kansas City, Mo., the contractors.

Only The "INADOR" has all these top-quality NORTON features.

- ✓ Rack and Pinion Construction gives uniform, positive checking at every point!
- ✓ New Aluminum Shell for lighter weight, robust wear. Proved by use on our surface closers for over 7 years.
- ✓ Special Spring—of highest quality steel
- ✓ Non-Gumming, Non-Freezing Hydraulic Fluid permanently lubricates every inside moving part!
- ✓ Double Adjusting Levers, easily moved by fingers, control speed of closing action and latching action!
- ✓ Regular Arm Series and Holder Arm Series—the latter especially suited for hospital use!
- ✓ Famous Guarantee! For 2 full years, providing recommended sizes are used!

Only a Liquid Closer gives so much
Rugged Dependability!

Only Concealed Design gives so much
Modern Beauty...it's the

NORTON "INADOR"

Headquarters for five Ford manufacturing divisions will be the new Rouge Office Building at Dearborn, Michigan. The 3-story, 369,000 square foot structure, utilizing the unusual "lift slab" method of construction, features handsome, modern styling. And it's designed, too, to "stand-up" under unusually heavy use, for the years to come!

As a result, it represents an ideal application for Norton "Inador" Closers, which were selected for interior door control. The "Inador's" construction preserves the building's trim, functional beauty. Yet, since the "unseen" mechanism is of the true Liquid Type, it provides the full measure of reliability—for smooth, low-maintenance operation in heavy-traffic use!

These are the reasons why you should choose Norton "Inador" for that new building of yours that needs the best in rugged, modern closers!

Write today for FREE Catalog on full Norton line of Concealed and Surface Door Closers.

NORTON®

Dept. NS35 Berrien Springs, Michigan

"Over 70 Years of Leadership in the Door Closer Industry."

ANNOUNCING

The Classroom Furniture of Tomorrow... **TODAY**



Samsonite



a new concept in color...

a new dimension in design

The Mobile Samsonite Open Front Desk gives maximum storage space! Forms related unit with matching Pivot-Back chair.



The bright magic of
Russel Wright
 ...only with Samsonite
 Classroom Furniture



New sun-bright colors make drab Classrooms Cheerful

**This new classroom furniture
 makes attention less tiring,
 learning more fun!**

Samsonite combines creative imagination with scientific analysis and survey testing in 30 states...creates the most modern classroom furniture in the world!



290 square inches of writing surface! New Samsonite Tablet Desk Chair plays multiple roles in classroom, meeting rooms, lunchroom.

→ IN COMFORT...

all dimensions and contours embody gently flowing lines in back and seats, to promote proper posture, and insure maximum classroom attention. Desk and chair combinations come in *nine* posture-perfect sizes for every grade and for every school.

→ IN MOBILITY...

Samsonite's modern design allows the instructor to create exciting, informal layouts or conventional rectilinear arrangements...move units from room to room without conflict in color or contour.

→ IN DURABILITY...

new features like aluminum spats on legs, evidence Samsonite's insistence on furniture that's "strongest...lasts longest"...maximum economy for burdened school budgets.

A new note in schoolroom furniture, Samsonite's Circular Table lends an informal, non-institutional look to the classroom.



Samsonite's four colors were carefully selected to blend or contrast effectively with classroom colors nationally in use... to mix-match harmoniously among themselves, in pairs, or in other combinations. Look at the bright possibilities the new selection gives you.

GREY

A new, sparkling Grey tone blends with every color scheme.

BROWN

A new "freshened" Brown avoids usual drabness of that color.

TURQUOISE

A friendly Green-Blue introduces exciting classroom color interest.

TERRA COTTA

A lively yet subdued Red, refreshing in any room.

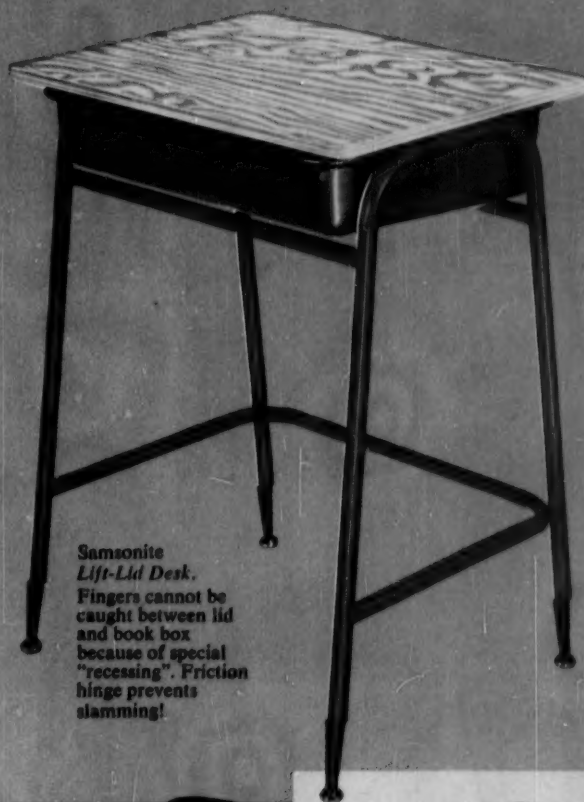
New comfort-curved contours keep young bodies healthy



For all group activities, Samsonite's colorful *Activity Table* with three book boxes. (Also available with six boxes.)



Newness of line, brilliance of color, keynote Samsonite's new *Teacher's Desk*. Maximum work and storage space!



Samsonite *Lift-Lid Desk*. Fingers cannot be caught between lid and book box because of special "recessing". Friction hinge prevents slamming!



New Samsonite *Trapezoid Table* adapts in groups to endless combinations for varied school activities.

New rolling contours in Samsonite's *Unit Chair*. Available with Samsonite's new swivel back.



Back swivels to cradle every body movement!

Samsonite *Student Desk* can also serve as table. Several can be pushed together for group projects.



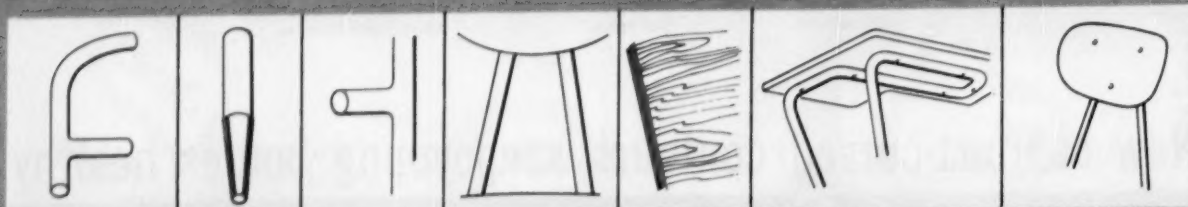
Plenty of leg room and storage space! The Samsonite *Shelf Desk* brings modern color, graceful lines to the classroom.



Why Samsonite is your smartest school buy

New construction advances for a bright new age in classrooms

MONEY SAVING DURABILITY



Tubular steel frame construction to combine lightweight mobility with extreme strength.

Roller-swaged leg taper. Thicker tubing at bottom gives extra durability and support. Tapers encased in aluminum spots.

Resistance welded joints. Metal joints made in specially designed machines. Welds are as strong as frame itself.

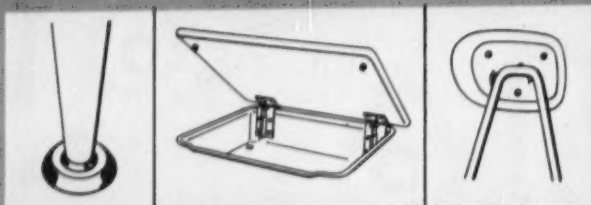
Electrostatically-deposited enamel on bend-resistant metal. Absolutely uniform enamel coverage. Non-chalking, highly resistant to abrasion and chipping.

Best quality adhesives. Wooden joints are bonded with water resistant urea resin adhesives, cured under heat and pressure.

Perfectly balanced supports. Tablet arms and tablet desk supports are made of continuous lengths of steel. Cantilever distributes all stresses evenly.

Plastic bush support. Never needs refinishing. Steel reinforcement plate insures perfect distribution of stresses.

FULL CLASSROOM SILENCE

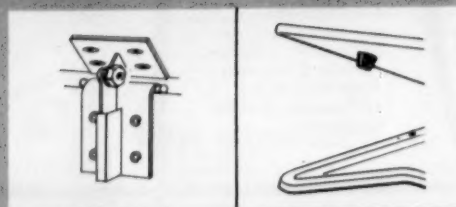


Silent glides. Polished steel glides cushioned in rubber eliminate distracting noise from moving furniture.

No-slam lids. Rugged friction hinges prevent slamming. Countersunk rubber grommets eliminate all possibility of noise.

Rubber stop on pivoting back guarantees completely silent pivot operation.

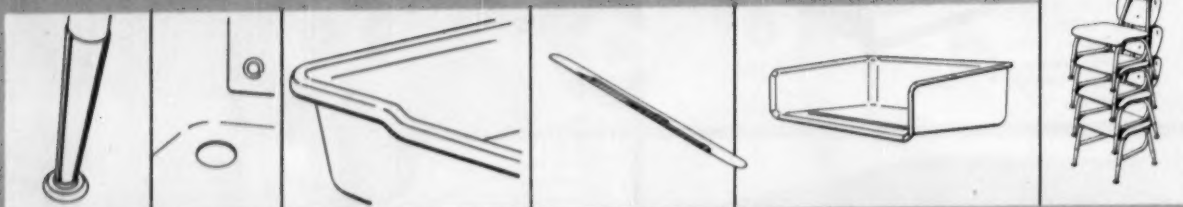
MISCHIEF PROOF



Self-locking fasteners can't be loosened with coins, knives or even screwdrivers.

Roller bumpers on desk lid are countersunk, cannot be pried loose.

EASY, TIME-SAVING MAINTENANCE



Tapered aluminum spats camouflage scuffs and mop marks.

Clean out holes in desks and book boxes prevent dust accumulation, save time in cleaning.

Flanged, beaded and beveled corners and edges simplify cleaning, eliminate dust accumulation.

Curved edges and grooves on pencil trays for thorough cleaning in a jiffy.

Single stamping bush boxes, racks and shelves. No seams, joints or rough edges to collect dust or hamper cleaning.

Easy stacking. Shape of chair legs compatible with shape and size of seats. Chairs may be stacked securely four high.

Makers of the famous Samsonite folding tables and chairs for every institutional use

Samsonite ...the Classroom Furniture that's
STRONGEST...LASTS LONGEST!

New Samsonite Classroom Furniture Catalogue

Complete specifications on new Samsonite Classroom Furniture, fully illustrated in color. Write to Shwayder Bros., Classroom Furniture Division, Detroit 29, Mich. for a copy and for the name of your nearest distributor.

...pillar of the library



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The Encyclopedia **AMERICANA**

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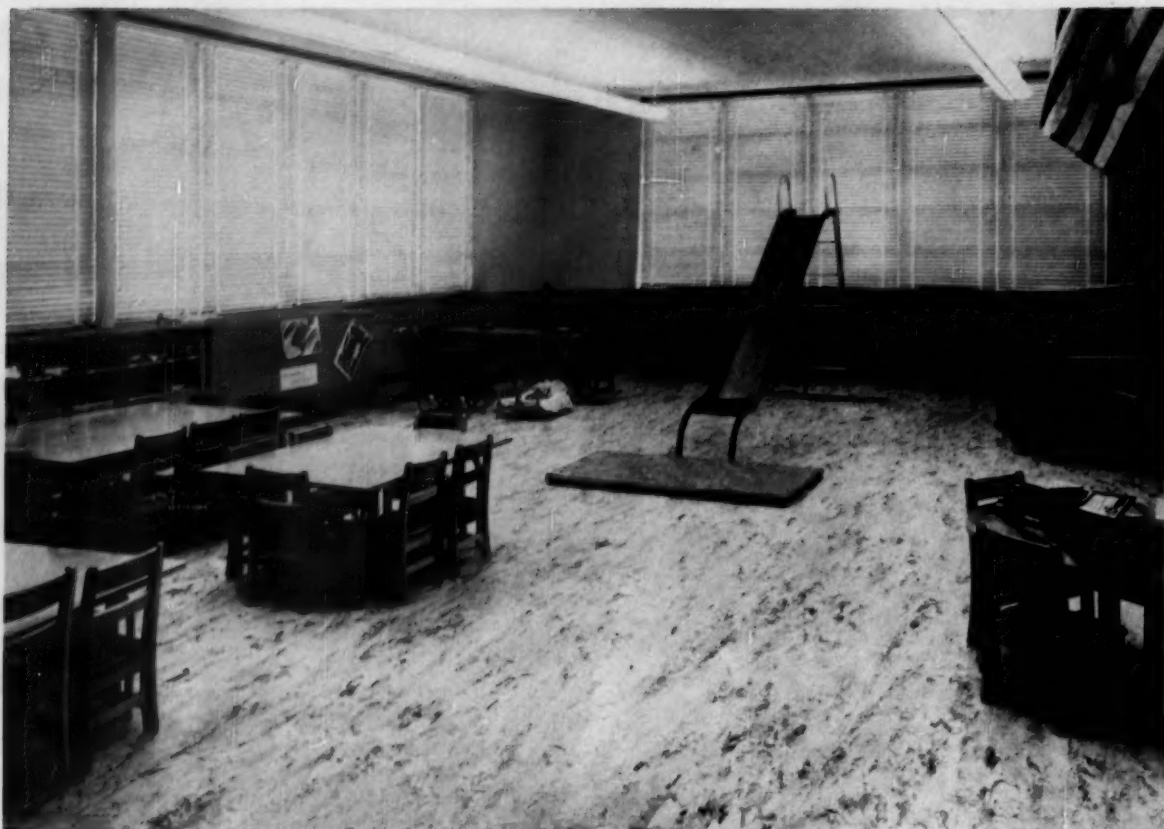
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School days will never faze this floor...



GOLD SEAL INLAID LINOLEUM

America's finest inlaid linoleum . . . the *only* one made by the natural oxidation process for greater resilience and durability!

It's tough! So tough, installations over 30 years' old are still giving great service.

Easy to maintain! Highly resistant to ordinary grease, oils, chalk, dirt, grime, scuffing. Dense, satin-smooth surface will rarely pit, scar, or chip. Cuts maintenance time, troubles and costs.

Resilient! Deadens floor noise. Resists permanent indentation from heavy furniture. Comfortable! Reduces foot fatigue.

Colorful! Wide range of colors to harmonize with any decorative scheme. Suggests hundreds of handsome, special designs to direct traffic flow, separate areas.

Stays colorful! Colors are *inlaid* for long-lasting beauty!

Economical! Low maintenance! Initial costs can be amortized over long period of time. Lasts years longer than low-cost floors.

Guaranteed! Gives you the famous Gold Seal Guarantee . . . satisfaction or your money back.

Specifications! Commercial Gauge (1/8") for heavy traffic areas. 6' wide by-the-yard and 9" x 9" tile. Burlap back. Patterns: 20 Veltone®; 4 Plain; 6 Battleship; 5 Jasper. Install over suspended wood or concrete subfloors. Specially designed Ranchtile Linoleum in 9 textured patterns is also available for installation in schools over concrete slabs at ground level . . . even with radiant heat.



For home or business...
you get the finest choice of all in...

INLAID LINOLEUM • RANCHTILE® LINOLEUM • VINYLFLOR • VINYLTOP • LINOLEUM, VINYL, VINYLBEST, CORK, RUBBER AND ASPHALT TILES • CONGOLEUM® AND CONGOWALL® ENAMEL-SURFACE FLOOR AND WALL COVERING

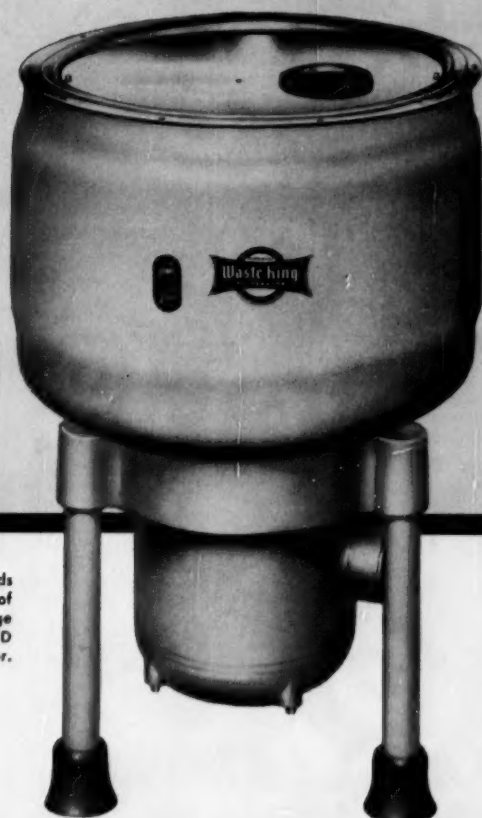


WASTE KING Pulverator

Announces

REVOLUTIONARY GARBAGE DISPOSERS PULVERIZE 2000 lbs.* PER HOUR AT "POINT-OF-ORIGIN!"

Now, here are the most powerful, compact and efficient garbage disposers you can buy. Four completely new, different WASTE KING PULVERATORS, models IND954-3, IND954-1½, IND854-3 and IND854-1½



*2,000 pounds per hour of mixed garbage with Model IND and 3 HP motor.

**DESIGNED FOR HEAVY VOLUME USERS—
RESTAURANTS, HOTELS, HOSPITALS,
SCHOOLS, MARKETS, INSTITUTIONS**



Exclusive "Spra-Rinse" pre-rinses dishes ahead of dishwasher. Available on models Ind954-3 & Ind954-1½

Exclusive splash guard Dome Cover permits volume bulk feeding at central location. Available on models Ind854-3 & Ind854-1½

EACH IND MODEL COMES COMPLETE WITH ALL NECESSARY CONTROLS AND FITTINGS

SUPER-POWERFUL PERFORMANCE Models Ind954-3 and Ind854-3 are equipped with a 3 HP motor; models Ind954-1½ and Ind854-1½ with a 1½ HP motor. Under actual tests all IND models do the job better than units with higher horsepower. One demonstration will show you why!

QUIETER, SMOOTHER OPERATION Super-tough, durable "Hush-Cushion" insulation throughout.

EXCLUSIVE RIND RIPPER Prevents "free-riding" of large pieces of melon rind and fruit skin.



GIVEN Manufacturing Co.
Largest Producer of Garbage Disposers in America!

**FREE!
ACT NOW!**
Send for new WASTE KING full "Line Folder." Mail coupon today!



GIVEN MFG. CO. Dept. NS-3
3301 Fruitland Ave., Los Angeles 38, Calif.
Send free copy of new Waste King "Line Folder!"

My Name _____ Title _____
Firm Name _____
Address _____
City _____ Zone _____ State _____

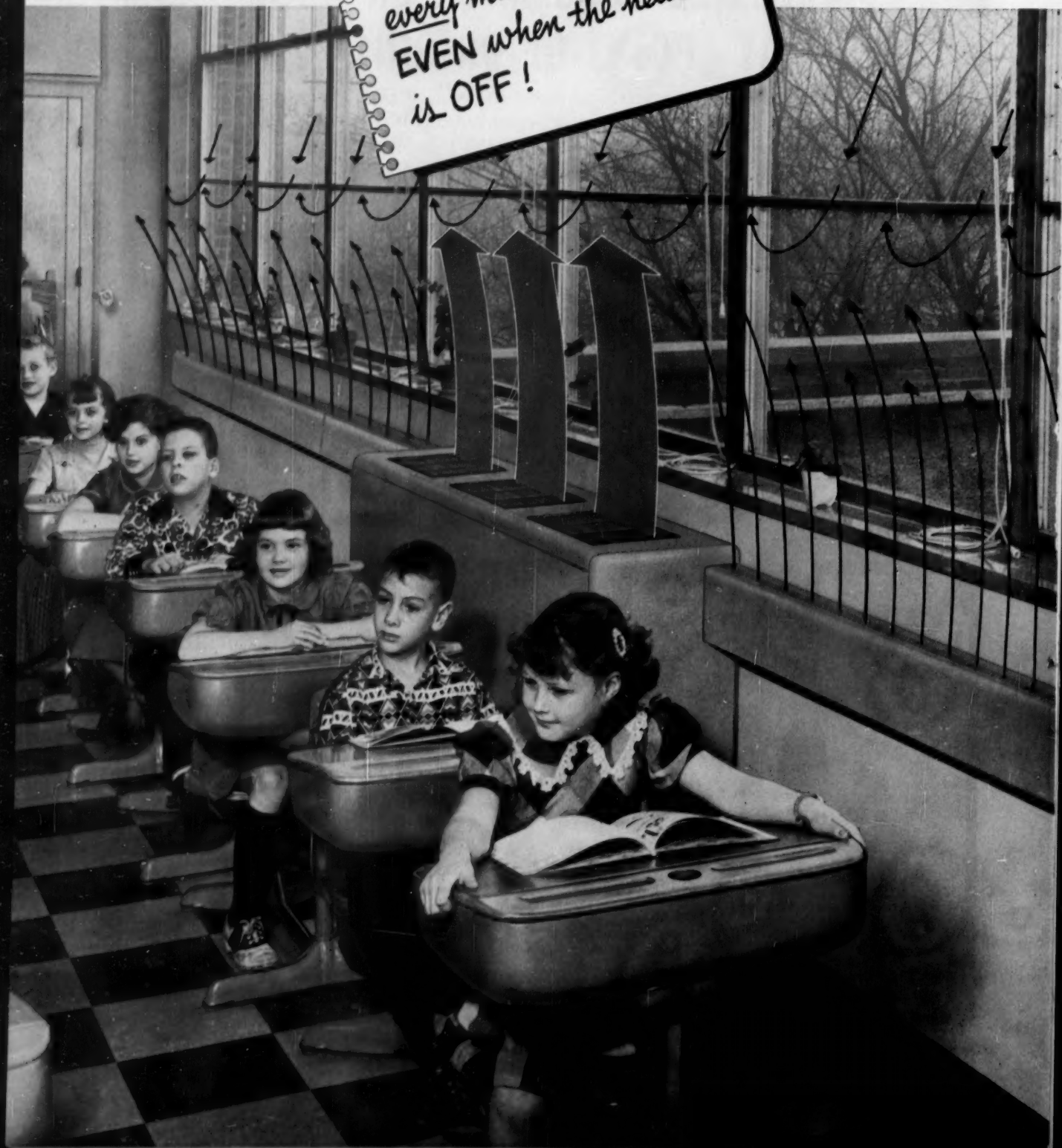
PROBLEM...

Arrows show how TRANE Kinetic Barrier works—Central unit heats and blends room air and outside air in correct proportion. This tempered air, under constant pressure, is projected upward from the central unit (heavy arrows) and also from lateral extensions along the entire window or outside wall, as indicated by small arrows. Drafts are stopped before they start.

How to end
classroom drafts—
overheating—
stagnant air—
everywhere in the room
every minute of the day
EVEN when the heat
is OFF!

SOLUTION...

Trane



Unit Ventilators with Kinetic Barrier Action!

It's amazing, but even on a cold winter day, tests prove classrooms actually need *cooling* as much as 75% of the time to prevent serious overheating. *The reason:* Body heat from children, plus heat from lights, sun, other sources. The trouble is, when the room thermostat shuts off the heat, ordinary schoolroom heating-ventilating systems cannot fully protect the children against the chilly downdrafts that pour off cold window surfaces.

Every minute of the day TRANE Kinetic Barrier Action prevents cold window downdrafts — gently surrounds every pupil in the room with tempered-air comfort—even when the heat is off! A continuous, rising wall of tempered air

blocks downdraft—distributes comfort in a room-wide pattern that reaches into every nook and corner of the room.

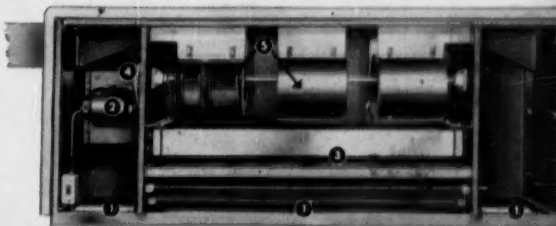
That's the kind of comfort that keeps pupils attentive and wide-awake—and ends forever such classroom hazards as chilly drafts off cold windows...over-heating that makes pupils drowsy (and wastes fuel)...stagnant air that multiplies odors. For healthful classroom heating and ventilation—for low maintenance—for beauty that matches your school—install TRANE Unit Ventilators with Kinetic Barrier Action!

For more information call your TRANE Sales Office or write TRANE, La Crosse, Wis., for illustrated booklet.

CUTS MAINTENANCE AS MUCH AS 50%, RUNS QUIETER!

TRANE KB Unit Ventilators were designed for low maintenance. Check these points.

1. Interior easier to get at—three small panels quickly removed by one man. Ordinary units have one big panel that needs two men.
2. Motor is standard—constant-speed motor can be repaired or replaced by any electric shop. Motor is located in end pocket, outside of air stream, can be quickly, easily serviced.
3. Coils stay clean—all the air is filtered before it reaches the coil—coil stays clean, longer. Clean air cuts decorating bills, too. And filter is easy to change.
4. Unit runs whisper-quiet—motor floats in resilient mounting—belt drive is quieter—special fans move air silently—no whistle.
5. Easy to remove foreign objects from fan—fan scroll snaps off and on—buttons, pins, etc., can be removed in a jiffy.



Volume Ventilator: Ideal for auditoriums, gyms.



Steam Specialties: Full line of valves, traps, vents.



Convectors: Free-standing, wall-hung or recessed; flat or sloping top.



Wall-Fins: Fine under low windows, in long halls.



Fans and Coils: Famed for efficient TRANE design.

one source
•
one
responsibility

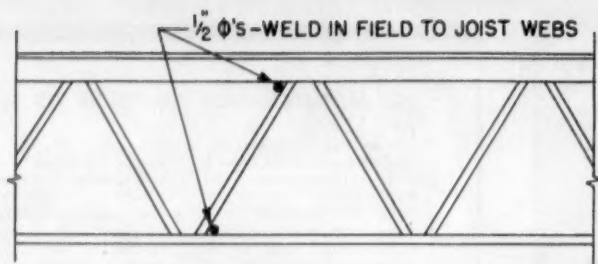
TRANE

Unit Ventilators with Kinetic Barrier Action

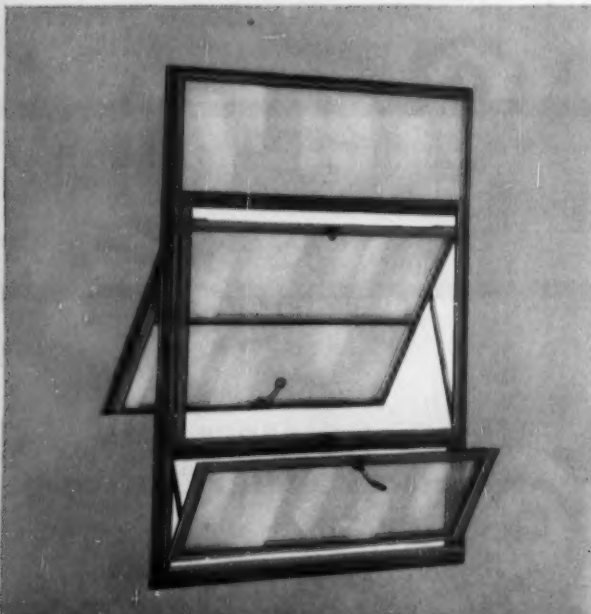
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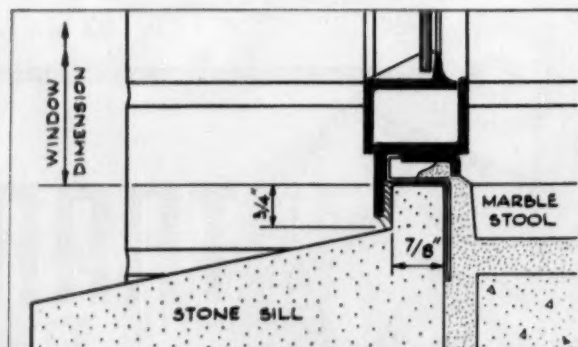
Front view of Normandy Road School, Bay Village, Ohio. Architects: Mellenbrook, Foley & Scott. Contractor: J. L. Hunting Company.



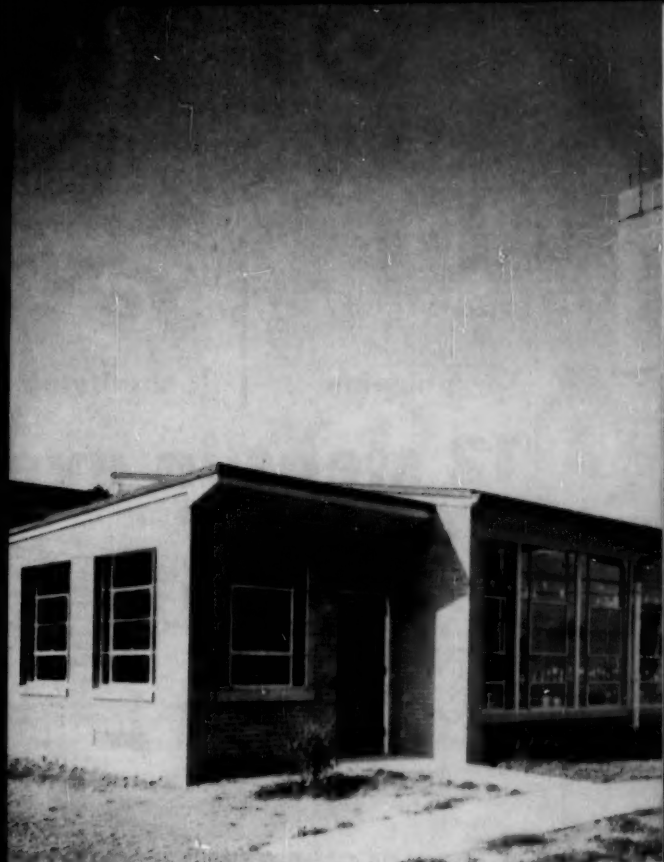
This $\frac{1}{2}$ " round horizontal bridging is recommended by the Steel Joist Institute, with $\frac{1}{4}$ " round bars bridging both top and bottom chords.



Casco Architectural Project-A Windows also contributed toward an economical, functional building. Their solid hot-rolled sections provide easy wall-bearing anchorage, strength, flexibility of ventilation — plus beauty and good daylighting.



This sill detail, with the window frame overlapping the stone sill and the joint properly caulked, provides efficient watertightness and drainage. Another school-wise feature is the marble stool.



Close-up detail of Normandy Road School.
Note the variations in window use.

*How a school for 400 students
was built on a limited budget...*

ARCHITECTS CUT FRAMING COSTS 15% WITH CECO STEEL JOISTS

It takes more than ingenuity to meet building budget problems... knowledge of workable short cuts is important here. So Architects Mellenbrook, Foley & Scott drew deeply on experience in designing the Normandy Road School, Bay Village, Ohio. The problem was to accommodate a set number of students—with a limited budget. Ceco Steel Joist Construction contributed to the solution by saving 15% over other floor and roof framing methods. It is the lightest of all fire-safe constructions and is easiest and fastest to erect. Ceco Standard Steel Joists were used effectively in classroom, office and corridor areas—bays being from 9' 9 $\frac{1}{8}$ " to 27' 4 $\frac{1}{2}$ " wide. Extended

ends provided low-cost sunshade overhangs, cantilevered over the window areas. Ceco Longspan Steel Joists with nailer strips simplified framing of gymnasium areas. At least a month's time was saved because steel joists are erected faster than heavier framing. All Ceco deliveries were timed to meet the schedules of the contractor. Here is another example of Ceco performing on the architect-contractor-supplier team to help meet a building need. Next time, call on Ceco Product Specialists. They will assist you in planning and saving.

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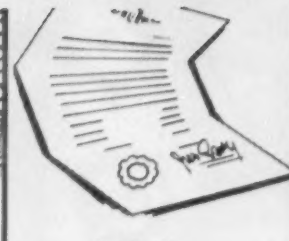
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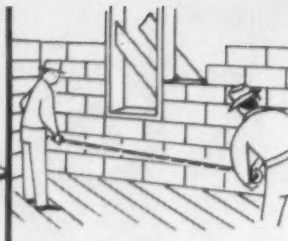
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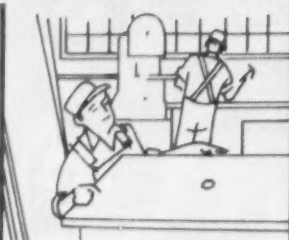
12 steps in every laboratory job



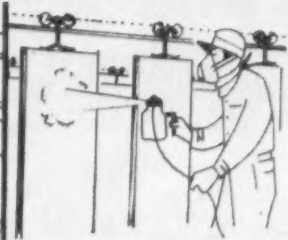
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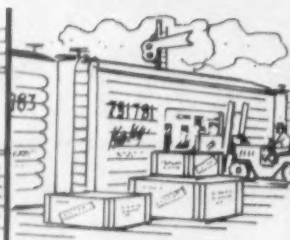
12 reasons why it's smart to allow



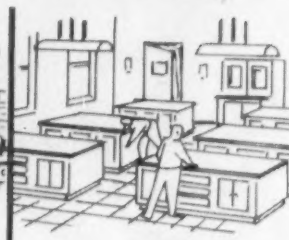
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Looking Forward

Omit the Obvious

THE question is germane: What purpose will be served by the state conferences on education? The majority of these state programs (prologues to the national conference in the nation's capital in November 1955) are now being planned and scheduled. If, as Secretary Oveta Culp Hobby first announced, the intent of such meetings is merely to discover the current needs of public education, the programs will serve no significant purpose. The critical needs of public education are well known and definitely established.

To the extent that such meetings become news and therefore merit space in the daily press, the state conferences can give publicity and emphasis to these known facts about classroom shortage, teacher shortage, and inadequate salaries.

Let's hope, however, that the state meetings will serve worthier purposes than merely to delay legislative action or to review the obvious. There are profound issues with which the conferences should be concerned—to wit, the *causal* factors for our current critical shortages in school facilities and personnel.

Let thinking leaders in the states, among both educators and laymen, deal with the current lack of understanding of the fundamental nature of public education in our type of society.

Let educators recognize that we failed to teach in the school an adequate understanding of democracy and of public education. And let researchers dramatize how this nation does have the resources to invest two or three times as much money in public education as it is now doing.

Give fact-finders a chance to show that we are finding much money for material things we think we want, such as roads and luxuries.

Said Walter Lippmann in his syndicated column (February 4): "The money and the public effort which are being put into the public school system are on the scale of an earlier age. They do not permit the schools to keep pace with the growth of the

population, with the change in the American ways of life, and with the new position of this country in the world. . . .

"Americans have come into a time when they will have to make a comparable change in their thinking about what they need to spend on education, what they believe they can afford to spend on education. At a very conservative estimate in the next 10 years they will have to double the amount spent each year on the public schools. . . .

"Though Americans cannot solve all the problems with more money, that is no excuse for failing to meet the gross, material, obvious deficiencies which can be cured and have to be cured with money. . . .

"The material and quantitative problems will have to be brought under control if Americans are to face lucidly and calmly and productively the problems of purpose and the problems of quality in the education of children for the modern age."

We think Mr. Lippmann would agree that the discussion groups at state conferences should deal with these questions of *purpose* and *quality*, such as:

What do we really want education to do for us?

Are we educating for peace and world understanding?

How can our schools teach social values?

Are we neglecting the fundamental purpose of public education—the preparation of citizens for a democracy?

The Purpose of Codes

AN ENLIGHTENING philosophy of ethics for the teaching profession, as it operates in public schools, is offered by Cyrus C. Perry, legal counsel to the N.E.A., in the January issue of the *Annals of the American Academy of Political and Social Science*.

For educators, he said: "The primary consideration in developing programs on ethics [whether the codes are on a regional, state or national level] is neither disciplinary action nor promotion of the teacher's individual welfare. Rather, it is *professional growth*. Codes of ethics are points of reference for individual

teachers in developing their own standards. They also are guides to the profession in seeking to achieve its ideals of professional service."

The entire January issue of the *Annals* (except for its book department) is concerned with "Ethical Standards and Professional Conduct." As one reads about the precise and implemented codes for other professions, especially the medical and legal fields, one wonders why codes of ethics for teachers seem so inadequate and inarticulate.

But Mr. Perry points out that those who teach in public schools "are subject to supervision and direction which constitute restraints on unethical conduct not present in the case of a private practitioner." Consequently "public school teachers have direct and varying ethical obligations to a multiple clientele."

Quite naturally then, as Mr. Perry concludes, the chief application of a code to the practice of teaching is "to raise standards in the profession generally and, in turn, the level of service to the community."

Fear Not, Fret Not

FRET not, dear teachers, for your fears are now going to be cataloged, analyzed and published.

Announcement by Robert M. Hutchins, president of the Fund for the Republic (a Ford Foundation subsidiary), assures you that a nationwide study will be financed by his organization to "assess the degree of fear among teachers in such areas as the handling of controversial subjects in the classroom; their relationships with students, fellow teachers, and administrative superiors; their feeling about expressing unpopular opinions in professional publications; their willingness to take part in extracurricular and community affairs, and the influence of tenure on academic freedom."

The study is to be made in both college and high school fields, primarily through the use of questionnaires and some interviews.

Let's eavesdrop on an imaginary conversation in which the would-be interviewer invites three high school teachers to fill out questionnaires for the study:

Interviewer: "Do you recall any situation in which the attitude of a school board member has affected your teaching?"

First teacher: "Oh, yes, indeed. One of our board members is a leader of the Minute Women here, and she is *so* happy to have us teach about the United Nations and UNESCO."

Second teacher: "In our health classes we have been talking about socialized medicine. I'm sure the president of our board—he's a physician, you know—is delighted to have us look at all sides of the case."

Third teacher: "We have a policy of democratic administration here—committees to recommend textbooks, to help plan new buildings, and so on."

Interviewer: "Then I'm sure you will be glad to fill out these questionnaires. It isn't necessary that you sign them, you know."

Later, the three teachers visit as they drive home, share-the-ride plan:

"Are you really going to fill out one of those questionnaires?"

"Fill it out? I've already lost it."

"But you can't do that. They'll check up on you."

"You don't think I'm going to write what I really believe in a questionnaire for the administration and strangers to read. The V.P. knows every style of handwriting and every typewriter face in the building."

"Neither am I. I'm more afraid of a study like this than I am of the school board."

"What do you mean?"

"They're not going to find out what we fear, not with questionnaires and traditional interviews. I'd really like to tell him what a farce democratic administration here is, how we recommend textbooks but the board decides otherwise, how we are asked to suggest new ideas for a school building after the plans are drawn. I'm afraid that the study itself will give wrong impressions."

"Well, if you haven't any confidence in the proposed study, what would you do?"

"I'd spend that \$165,000 for something more constructive. If they really want to help us, we don't need a study to show that these fears exist. We need help and encouragement to deal with them. If they want to spend money in this field, why don't they discover, publicize and praise the communities, school boards, and administrators that have recognized these fears and have dealt with them intelligently? The fears and tensions are obvious; the solutions are not!"

Inevitable Change

WOULD it be interesting to know how many students in high school studied music and art or agriculture back in 1890? Or perhaps you can guess the percentage of high school students who were enrolled in physical education, business education, home economics, or industrial arts classes 65 years ago.

If your answer is "none" for all of these subjects, your guess is correct. Not one of these subjects, recognized as so essential in the training of our young people today, was included in the secondary school curriculum back in 1890, according to reports from the U.S. Office of Education.

The story these statistics do *not* tell is that most of these changes have resulted from demands from parents and the public rather than from leadership within the profession.

The Editor

THE NATION'S SCHOOLS



Along with our new horses we need chevaliers who believe in the dignity of all men.

Let's teach the New Chivalry:

DEMOCRACY OBLIGES

JAMES M. SPINNING

Rochester, N.Y.

MOST people can be persuaded to agree that basically life presents just two problems and that these apply both to the individual and to the nation. These are:

1. Keeping alive.
2. Getting something out of life worth keeping alive for.

For most of us keeping alive as individuals means getting and using skills that bring us shekels for food, clothing and shelter—or handling the shekels we have with such prudence that they'll see us through. For the nation it means an economy so sound that it can provide the setting in which people can stay alive.

But how about Problem No. 2? How about a life worth living? That implies reasonable freedom, not just freedom of speech and the remainder of the Bill of Rights but freedom to develop one's own powers to live as fully as he can; to savor the delights of earth and air and sea and sky; to know the joys of companionship, of marriage and children; of thinking large, and not just petty, thoughts; of building and creating; of working and achieving; of being a person not only with inalienable rights but with inalienable yearnings and strivings.

Not all of us get all of these things. Most of us would settle for most of them. And that's all right, too. One might even hold paradoxically that no man has a right to all his rights because if he centers too much on getting them all he is likely to become engrossed in that one aspect of living—the getting aspect. He becomes self-centered, introverted. Like the monkey in the fable, he lets his hand stay stuck in the jar because he is unwilling to relinquish anything. Many a man loses half his life by insisting on all of it.

Sadly enough, the half he loses is generally the one that holds the lasting joys, the joys of maturity: the joy of helping and of giving; the joy of being interested in things outside ourselves; the joy of speculating on and of partly finding our relationship to the Universe, to the Eternal, to God—even to our fellow men and to ourselves.

In education this seems to mean that:

1. All young people should have the tools of learning—the three R's, not the little three R's, but the Big Three R's: *reading* which is not just rudimentary word-calling but broad

enough and prolonged enough to give us the means toward knowing what we need to know and want to know, reading that makes us heirs of the best that has been thought and said and done in the world; *writing* that goes beyond "Yours received and in reply would say"—writing conceived as all communication in all media, sufficiently mastered to enable us to tell the world and each other accurately and convincingly, and to this end even artistically; *arithmetic* that embraces all the science of number and of quantity, both the theory and the practical stuff that helps to make us masters of the physical world.

None of us can get it all. Some of us had better come darned near it, or this technological world of ours either just won't keep going or will blow up on us. We need the scientists and the technicians if we are going to continue to feed and clothe and house ourselves. We need the basic training for these things, and we need the basic training *in* these things for those who are going to teach the next generation. Our schools must take initial responsibility here.

2. But it is the Big Three R's for a Big World which are especially im-

**Our big wheels could do with a little
more faith, including faith in and
regard for the little wheels.**

**Even with all our media of mass
communication, are we doing all we should
to make sure that we record the *reasoned*
will and the *heart* of the people?**

**Majority rule is safe only if it can
protect itself against
its own waves of unreason.**

**I want a democracy that prizes good
leadership, the kind that operates in the
spirit, not the jugglery of democracy,
that values the essence beyond the trappings.
And this goes for school administration
as well as for the instructional program.**

portant in a nation committed to democracy, as in all nations committed to the free way of life, where in the last analysis the people must make the decisions.

Which leads me to what I really want to say. It's about democracy and our approach to it in the schools. The democratic way is hard. The answers aren't all in the book. Democracy calls for decisions by everyone, and, oh, how we hate decisions! For decision making means assuming responsibility, which means forsaking childhood for adulthood, and, by golly, that is hard.

We all know that democracy must be learned anew by each generation. But I'm afraid that in our imparting

or inculcating or whatever we do about it in the schools we often succeed in conveying more of its machinery than of its meaning or of its purpose. For example, I think a lot of us manage to come out of school with only a primitive idea about majority rule. Majority rule is safe only if it can protect itself against its own waves of unreason, its hysterias; against its own possible tyrannies. The Founding Fathers sought to ensure our safety against our lesser selves by a neatly contrived balance of power and by reserving certain fundamental rights to minorities. But, as Alan Valentine points out in his "Age of Conformity," extension of popular rule beyond what the Constitution framers provided has

tended to challenge these safeguards. I note his fears, but I do not share all his inferences. In spite of many evasions I believe that we've made great progress toward keeping the constitutional guarantees and even toward strengthening them.

But sometimes I think we are limited in our understanding of democracy because we pay more attention to its machinery than to its spirit. We do a lot of counting. We count our legislators, we count our pluralities, we count our ballots (sometimes we even recount them), we decide things by vote. We seem to have ample machinery for recording the will of the people. But even with all our media of mass communication, are we doing all we should to make sure that we record the *reasoned* will and the *heart* of the people? Of course, that implies doing something about their reasons and their hearts. But that I think we can do, and do it in the schools.

Big caution: I'm not talking about indoctrination, about telling anybody how to vote. That we all stand against. I'm talking about putting more emphasis on the spirit of democracy. I'm talking about the thing that must be behind all machinery, all laws—the essence of democracy. I don't mean just equality before the law. I don't mean the law at all. I mean the spirit in which we operate all laws, all politics, all business, all education, all private and personal transactions.

Let me put it another way, admittedly oversimplified, but the way in which I think our schools over the nation must catch hold of it and work on it.

What I'm talking about is a new chivalry, a chivalry of democracy. In medieval times we had an ideal of chivalry. The word itself comes from *cheval*, horse. A man who had a horse had power, and because he had power he had status. He was quite literally looked up to, this chevalier. His status meant that he had obligations, obligations summed up in the phrase *noblesse oblige*—nobility obligates. His nobility, what he owed to his station as proprietor of a horse, laid on him an obligation to defend the weak, to right wrongs, to rescue damsels in distress. I'm inclined to think that he spent altogether too much time undistressing damsels. But, after all, he did have a code, vows of service which he must keep or be deknighted or disbarred or something.

We all know that with the end of the feudal system knighthood and chivalry went out of flower, and, because of abuses and deficiencies, rightly so. The horsey set was gone. But with the coming of the so-called Age of Reason and of the Common Man and the Industrial Revolution, even with all the teachings of Christianity, even with the service clubs and the boy scouts, even with the growth of the trusteeship idea, even in that era of 50 years ago when the colleges openly preached a life of service, we never got quite such an exalted or all-round respected code again.

Today we have more horses, millions more—just look under the hood; just hear the jalopies whinny. What we need, along with all our new horses and all our kilowatts, is a phrase in plain American that says *democracy obliges*, a phrase that says it is the democracy in me that makes me do this right and decent thing and not do that shabby trick; that says because I am a member of the Free World I do this and I do not do that; that says I do this because I am a disciple of democracy, a believer in the dignity of all men; I will not violate the sanctity of their feelings; I will not accept anything for myself which I am not willing and glad that others should have on the same terms; I will not even cheat on my income tax; I will give every man the status and the respect that God gives him.

A GREAT MAN

Once there was a man whose neighbors held him to be a great man. They knew he was great because beside him they felt so small. But once there was a man of whom they said, "We know he is a great man because when we are with him we ourselves feel bigger."

It is so easy for us, even in a democracy, to get too big for our hats and our britches, so easy to pretend that we are big wheels and that only the big wheels count. How does the spiritual go? "The Big Wheel runs by faith, and the little wheel runs by the Grace of God." Our big wheels could do with a little more faith, including faith in and regard for the little wheels.

Again, what do I mean? I mean that we aren't educated until we come truly to find democracy not just in the machinery of government but in the hearts of men. Democracy is a spirit. It is more than your rights

and the rights of your neighbor as expressed in law. It is the heart and soul of us all. It isn't just getting all we're entitled to; it's giving all we can—not just of money, but of status. It's consideration. It's politeness. Yes, the schools should teach manners, chiefly by example and by creating a climate where courtesy thrives. Democracy is *holding doors open*—doors for other people; literally, yes, but figuratively, too.

THE PLUS FACTOR

It's the plus factor in life. It's the thing that makes us say with Browning and Rabbi Ben Ezra, "Nearer we hold of God Who gives than of His tribes that take, I must believe." There was in the Age of Reason a doctrine, a doctrine of enlightened selfishness. It held that if only everybody would look after No. 1, just look after himself, everything would be dandy. Since society was merely the sum of all its parts, the whole thing was just as simple as simple arithmetic. The only trouble with this doctrine was that it didn't work. Under it there was no room for the Old Chivalry or the Modern Community Chest. There are always great gaps of neglect when men live only unto themselves. Where no one is his brother's keeper, society breaks down. Selfishness is never enlightened. In it no man can be fulfilled.

I maintain that nowhere in all the land except in his own home is a lad so valued for himself, without bar or slight because of race or creed or color or economic condition or mental or physical handicap, as he is in our public schools, valued for what he is and, bless his heart, for what he may

become. Nowhere in all the world is there such striving to level up and not to level down, nowhere such effort through all ranges of capacity to bring to each his maximum achievement. I just want to see more of it.

Perhaps *leveling up* is not the right phrase. For the democracy of the spirit does not deny but encourages leadership by the most capable—if these have the spirit of obligation and dedication of the chevalier. No more than Dean Melby do I want the kind of democracy that rests solely on mathematics and mechanics, that thinks that 10 ignorant votes are better than one intelligent vote, that tends to make sea lawyers and ward heelers of us rather than patriots. I want a democracy that prizes good leadership, the kind that operates in the spirit, not the jugglery, of democracy, that values the essence beyond the trappings. And this goes for school administration as well as for the instructional program. We need fewer committees and more committed souls.

THIRD PICCOLO

I want these youngsters of ours as they come through the turbulent days of adolescence not to cleave to some of the snobbery that they have copied from adults or to the cliquishness that is a natural phase in their development as they grope for status. I want to see them emerge into a poised adulthood where a guy can play first violin in the symphony of democracy without popping the buttons off his vest in vainglory, or where he can play third piccolo without being made to feel that he is inferior, just as long as he plays that piccolo as well as he can.

La democracie oblige!

—In St. Louis wel ymette—

The Editors Tale

Up riseth now the sonne of Februaire
On scolares gon to snif the gentil aire
Of old St. Louis, destyn of pilgrims bolde,
Who fede on wordes long and wesdom olde.
Nowher so besy a staf as ours wil be,
Mayhap we semes besier than are we.
We brenge lensman, quyk to flash each knight,
And notes we maken, then ful wel endite
From Vesper bel til Woden's clenek ende,
Eek bound in April *Schools* the tale we sende.
There n'is no man that may reporten al,
The Editors Tale wil be les long than tal;
But not a tale so tal that it be chepe,
Trouthe is the hyeste thing that man may kepe.

Loke in Aprille for to see

The bright child who is ready for school gets as much as six months' earlier start in kindergarten or first grade, because

Brookline Admits Them Early

HERBERT R. CONE

Boston

CAN you let Tommy start school this year?" the caller asked. "He's just a little under the age requirement, but he's a bright child. All his playmates are starting this September. I think that he'll be very disappointed if he has to stay at home."

Supt. Ernest Caverly was faced by a not uncommon problem. A request like this is difficult to deny. It seemed unreasonable to make a child wait a full year to begin school because of an arbitrarily chosen, inflexible age requirement. And wasteful, in that many children in Tommy's position are able to do school work well, at great profit to themselves. Yet the dangers and inequities in admitting children by personal preference, without assurance that they can in fact profit, are equally apparent.

For 23 years, a practical program for resolving this problem has been carried on in the schools of Brookline, Mass. By use of psychological measurements, physical examinations, and health evaluations, children who can profit from early school attendance are identified and admitted before their chronological ages would qualify them.

LOWER AGE LIMITS

Children who reach 4 years 9 months on October 1 are admitted to the Brookline school kindergarten. Those who have reached 5 years 9 months are admitted to the first grade. Under the early admission program, children as much as six months younger may be admitted if they evidence a mental maturity significantly beyond their chronological ages.

The child's performance on the Revised Stanford-Binet Scale is the principal determinant of this advanced maturity. Children aged between 4

years 3 months and 4 years 9 months are admitted to the kindergarten if the test shows their *mental ages* to be 5 years 2 months or higher. Those aged from 5 years 3 months to 5 years 9 months are admitted to the first grade when their *mental ages* are 6 years 2 months or higher. While kindergarten attendance is not a prerequisite to admission to the first grade, about 95 per cent of Brookline's first grade children have attended kindergarten.

In addition to mental age, social and emotional maturity are weighed in the selection process. While the test is being administered, Brookline psychometrists observe each child. They feel that successful completion of a task that usually requires 40 minutes is, in itself, good evidence of requisite social and emotional maturity.

The child's health and physical maturity are considered. In May of each year the school physician examines all children who are to be entered in the following September. He may recommend against admission of an underaged child who shows exaggerated fears or has temper tantrums during the examination. Weakness, physical maturity substantially below the age standard, and poor health are also bases for disqualification. During the examination, which is attended by the parents, the physician indicates remediable defects that must be treated before the child is formally admitted.

ADMITTED EARLY ON CONDITION

All early admissions are conditional upon satisfactory performance by the child. In the letter admitting the underaged child, parents are given to understand that they are obligated to withdraw the child on the school's request. Children who seem unable to

work with others and who manifest physical and emotional strain by protracted crying, withdrawal or vomiting are clearly unsuited to the school environment, and their withdrawal is effected. In practice, few such requests have to be made. In recent years, the average has not reached one per year.

RETEST IS GRANTED

Over the years, about 55 per cent of the from 200 to 250 children presented for the annual examinations are admitted early—though this proportion is skewed by the fact that more children from the group nearest the age for routine admission than from that furthest removed are registered for the test. This proportion includes children who make qualifying scores on the retest, which may be given at the parents' request when the first sitting is unsuccessful. In this, a different but equivalent form of the test is administered by a second examiner. The 120 or more underage children admitted each year represent between 20 and 25 per cent of the total kindergarten admissions.

The academic records of the underaged children in the Brookline schools offer documentary evidence of the early admission program's success. The first 10 year report (the second is now in preparation) indicated that marks awarded the underage children began to surpass those earned by the older children in the first grade and that the margin of superiority increased progressively through Grade 8. In the group beginning the first grade in 1933, the percentage of underage children receiving the mark "A" was twice that of the older children in five of the eight elementary grades. In six of the eight grades, two-thirds of the under-

The underaged child is tested for mental age and physical and emotional maturity before he is allowed to enroll.



age children received marks of "A" and "B." In no grade did the older children approach this performance. Standardized test scores also reflected the superior achievement of the younger pupils.

Conversely, failures and conditional promotions were much less frequent among those under age. In the same 1933 group, the rate of failure among the older children was 6 per cent; among those under age, it was only 1 per cent.

Interestingly and significantly, it was found that marks awarded the younger children in the kindergarten were no more than at parity with the marks given the older children. Investigation indicated that the standards of performance upon which kindergarten teachers evaluated pupils were manual skills and independence of adult direction, rather than the mental capacities measured by the Stanford-Binet Scale. In the few cases in which the deficiency seemed to warrant it, the underage child was restored to his chronological age group by being retained in the kindergarten for a second year.

TRIAL-AND-ERROR PERIOD

The development of the plan to the present was not without its problems and trial-and-error solutions. Much effort has gone into experimental determination of chronological and mental admission ages that would both meet the needs of the community and ensure the highest proportion of pupil success. Before establishment of the present six-month latitude, margins of from three to nine months were weighed. The three-month margin, experience showed, offered too little flexibility. With the three-month margin, mental age requirements were set

at 4 years 10 months and 5 years 10 months for kindergarten and first grade admission respectively. In 1936, these were raised to 5 and 6 years, and in 1947 to 5 years 2 months and 6 years 2 months. This progressive rise in standards was dictated by research which showed that the poorest performing pupils were among those whose test scores were nearest the minimum required for admission and those nearest the minimum age.

Other obstacles lay in relation between school staff and parents. Many teachers thought that the younger children required a disproportionate part of their attention, which would better be devoted to the whole class. This complaint has been most often voiced by kindergarten teachers, who feel impatience in having to close long ranks of snowsuit zippers and in being obliged to perform the task of installing a small foot in a bitterly resisting overshoe.

EARLY OBSTACLES

Parents, too, contributed to the problem of public relations. For the ambitious parent, his child's failure to meet the requirement for underage admission often represented a bitter blow. Failure in the retest rubbed salt in the wound. This sort of response has become less frequent. The Brookline school committee has permitted no exceptions to this scheme, which has earned public confidence in it.

What staff is required to carry on this program? James Hobson, director of placement of the Brookline schools, carries out this activity. He is assisted by a professional staff of four, all trained in psychological and educational measurement. His estimate is that testing, which takes place in the

two weeks before the fall school session begins, requires only 5 per cent of the staff's annual time budget.

The early admission program is consistent with Massachusetts law, which requires public school attendance by children from 7 to 16 years of age. This gives the responsibility for admission policies to local communities. Actually, many of Brookline's neighboring communities have admission ages below its levels.

Inspection of the balance sheet reveals the preponderance of credit favoring the early admission policy. A significant entry is the acceleration of the gifted child's first school experience. A child of 4 years 3 months whose mental maturity equals that of a child of 5 years 2 months may be admitted to school a full year earlier than he otherwise would be. Presentation of the challenge of school work to this child, or even to other children whose mental maturity less dramatically exceeds their chronological ages, constitutes an important recognition of the different capacities of school children. This discrimination in favor of the advanced helps reduce the need for grade-skipping and double promotions in the elementary grades.

MIDDLE COURSE FOLLOWED

This is not to suggest that the policy implies a wish to establish an academically oriented elite. Dr. Hobson has attempted to effect a mean between the desire to advance the child of marked intellectual capacity and the dangers of isolating him in an congenial group substantially beyond him in social development. A great weight of evidence suggests that the mean is being achieved. The creditable academic records of the underage children, their histories of leadership in student affairs, their good deportment, and the relative infrequency of social, emotional and personality maladjustments among them provides evidence as nearly conclusive as possible.

The guiding thought of Brookline's superintendent of schools, Dr. Caverly, and of Dr. Hobson has been to build an admission policy which shows the same regard for individual differences that obtains among children already in school. The benefits of acceleration of the gifted and of assignment of the young child to the school entering group nearest him in age are corollary. It is with a pardonable pride that they regard their achievements as a major step toward this end.

**More high school teachers and students
are learning how to manage**

Personal and Family Finances

HEROLD C. HUNT

Eliot Professor of Education
Harvard University

IN THE preparation of our boys and girls for the responsibilities of citizenship and everyday life, one neglected area has been the need for a better understanding of how to manage personal and family money matters. Why is there this need for understanding of personal economic problems?

In the last 10 or 15 years there have been dramatic changes in our economy. Huge blocks of our population have been lifted from subsistence incomes to income levels where they can buy homes, cars, television sets, refrigerators and gadgets. They have the ability to save money and to borrow money.

They can debate the merits of such things as summer travel or renting a cabin in the mountains. Many millions of them for the first time in their lives have what some economists call discretionary spending power.

In 1939, according to U.S. Department of Commerce figures, fewer than 10 per cent of our families earned more than \$3000 a year. Today, more than 60 per cent earn more than \$3000. The poor are getting fewer; the middle income groups are getting much more numerous.

Case work done by family welfare societies and other community agencies

shows that families at all income levels have difficulty in balancing their budgets. At all levels, from subsistence to the very highest incomes, there is a strong tendency for many families to overspend. The family at subsistence level may buy a television set, a car, or a fur coat on installments instead of putting more money into badly needed food, clothing or shelter. The high income family may overspend on the country club, entertainment or travel.

Ambitions, vanities, personal tastes and habit are involved in the use of discretionary spending power; the problem is to help the family sort out these conflicting motivations and recognize them. Once this is done we can hope for an intelligent and well considered choice of expenditures. This,

Home-School-Community Week at Fort Wayne, Ind., gave parents a chance to see a display of family financial security, worked out at South Side High School by the students of Barbara Leif, home economics teacher.



RIGHT: At the summer workshops, teachers develop plans for integrating family finance into existing courses such as homemaking, family living, social studies, mathematics, business training, and guidance. BELOW: Teachers find it easy to involve the boys and girls in discussions of their own personal financial problems, both present and future.

PLAN FOR SAVING AND SPENDING				
ITEM	JANUARY	FEBRUARY	MARCH	APRIL
FIXED EXPENSES				
Rent or Mortgage	46.40	46.40	46.40	46.40
Taxes				
Life Insurance		81.10	55.00	
Other Insurance				
Savings	10.00	10.00		
Installments	20.00	20.00		



rather than mere personal bookkeeping, is the essence of good budgeting and this is what our schools should teach. We can teach the bookkeeping, too, but we need to teach the other first.

In teaching budgeting and many other phases of money management we are in the happy position of preparing the student for future responsibilities and at the same time helping him with an important and present problem. Most high school boys and many high school girls work at part-time jobs, and some of them earn rather considerable amounts of money. Many have social security taxes deducted from their pay and file income tax returns. Some of them even pay income taxes. They face difficulties in handling their money that a sympathetic teacher can recognize and help them meet—difficulties in making value judgments in their use of money, difficulties in family relationships at home, and difficulties in achieving status with their fellows.

LEARNING TO SPEND WISELY

A study was made a year ago among a thousand or more youngsters in a Pennsylvania junior high school; even among these seventh, eighth, and ninth grade students it was found that from 72 to 87 per cent of the boys and from 60 to 73 per cent of the girls had some income that they earned themselves. Few, if any, patterns were revealed, however, of what these youngsters did with their money. At one end of the scale were children who were given virtually no freedom of spending by their families and at the other end were

children who apparently were subject to no parental controls at all.

Saturday and after-school employment, if it is subject to reasonable restrictions, is valuable in the development of good work habits and employment skills. This value is generally recognized, but how often do parents or teachers recognize that the spending and saving of earned income is also valuable training?

MONEY MANAGEMENT SKILLS

Budgeting is one technic or skill that our schools can impart; another phase of money management that we can teach to advantage is the proper use of credit. When this country raised the earning power of its lower income families, it gave them at the same time a credit status they never had before. Charge accounts were opened to them, opportunity was given them to buy many more things on time, and banks and loan companies advertised for their business.

Economists can argue (and do) whether the expansion of consumer credit in this country has been too rapid. There is no doubt at all, however, that at least some individual families in the past few years have been using credit unwisely. The answer is to suggest to our students the good and bad uses of credit, the advantages of borrowing and the dangers. One skill we can teach is how to gauge the cost of borrowing from one credit source as compared with the cost of borrowing from another. This calls for a relatively simple mathematical competency, which could well be a part of the

mathematical training of every secondary school student in our country.

Young people also should have the chance to learn how to buy the insurance they need and how to avoid the kinds they do not; how to evaluate pension systems and to understand social security; how to use bank services, including how to write checks and to balance checking accounts. We can point out differences between different kinds of investments, teach some of the things to look for in renting apartments or buying homes, give instruction in figuring taxes.

TEACHER TRAINING, WORKSHOPS

To teach money management and family finance effectively, we must see to it that our teachers are given the necessary training to teach it well and are furnished with adequate teaching materials and instructional aids. This has been the aim of the National Committee for Education in Family Finance. The committee is composed of educators from various parts of the country who banded together in an effort to fill this need.

Since 1950 this group has been sponsoring summer workshops for teachers. These university workshops have been attended by almost a thousand teachers and administrators from all parts of the country representing many different subject areas—mathematics, social studies, home economics, general economics, business education, guidance, family life, and so on.

In sponsoring these workshops, which have been made possible in part by grants from the Institute of Life In-

surance, the committee has discovered that teacher training in this subject matter is not so difficult as many school administrators might think.

First of all, many universities have schools of business administration with faculty members able and willing to give the teachers background in various aspects of personal finance. They have schools of education to help them develop teaching methods and technics, as well as suitable teaching materials. College textbooks are available that help teachers become familiar with the subject matter, thus giving them a greater sense of security in teaching personal finance.

For the teacher's classes all kinds of source materials can be used. Many school textbooks now contain good sections on personal and family finance. Business organizations and government departments have produced study units, booklets, charts, filmstrips, motion pictures, and other kinds of teacher aids. This material, like all other material used in a school system, has to be evaluated in relation to the teacher's needs, but its general level is high and is getting better all the time.

Eight universities held workshops on education in family finance during the summers of 1953 and 1954: Connecticut, Denver, Miami, Oregon, Pennsylvania, Southern Methodist, Wisconsin and Virginia. In addition, new workshops will be started this coming summer at Syracuse University, the University of Florida, and the University of California at Los Angeles.

SCHOLARSHIPS OFFERED

Workshops vary in length from four to eight weeks and usually offer six semester credits in graduate work for successful completion of the course. Scholarships are awarded by the universities to all teachers and supervisors attending; most of these scholarships consist of board and room, some of tuition and room, while others are arranged in other ways. Participants pay a small part of the cost, usually tuition or board. Each university course is essentially regional in character except the one at the University of Pennsylvania; in this case, students are selected from throughout the United States. They receive tuition scholarships and their rail fare is paid to and from Philadelphia.

Teachers participating in these workshops prepare all kinds of materials to take back to their own classrooms and to their colleagues in other classrooms.

Resource units, teaching units, bibliographies, playlets, radio scripts, outlines for adult education programs, and P.T.A. forums—all these and more are prepared in the workshops, stencil duplicated, and taken back for use in local schools.

INSERVICE TRAINING PROGRAMS

There is, by now, the experience of at least 15 school systems to draw upon when inservice teacher training programs are set up. The systems include those of New York, Chicago, Philadelphia, St. Louis, and Oklahoma City, Okla., among others. Each of these programs has been set up by the board of education. In New York and St. Louis local committees of educators and businessmen were formed to cooperate in carrying out the program. In St. Louis, Chicago and other communities, the courses were offered in cooperation with near-by associated teacher training institutions.

In all these programs the courses consist of from five to 15 sessions of two or three hours each, part of the time being devoted to lectures and the remainder to group discussion and unit planning. Credits are offered toward salary increments by the local school systems, while in some cases college credits are also available.

The Philadelphia program is perhaps typical. The program conducted there is directed by David L. Ruberg, principal of Spring Garden Public School. He is an alumnus of the 1953 workshop in family finance at the University of Pennsylvania.

First offered last spring as a seven-session experimental program, the course proved so popular it was voted to expand it this year to a two-semester program offered in two parts with a total of 14 weekly class sessions.

Inservice training in family finance pays the extra dividend of giving financial advice to the teacher himself, advice that many of us in our profession can well use. But the basic motivation for setting up the program, of course, is to train the teacher so that he can bring this information to his class.

The down-to-earth nature of the subject matter in these courses makes them popular with teachers. For example, when the Chicago course was first offered in 1953, it was attended by 180 Chicago teachers. Last fall enrollment reached 450, with 150 more turned away for lack of space.

Where and how do teachers use this information in their classroom? The

answer is: mainly through development of units in family finance, which are integrated into existing courses in social studies, home economics, mathematics, business education, and family living. Guidance counselors also make liberal use of money management information, as do vocational teachers.

Although the committee recommends integration, a few high schools and many colleges have developed separate courses in family finance. In one Texas high school, a course first offered in 1953-54 has become so popular that this year it had to be expanded into four sections.

Liberal use is made of skits, playlets and films to motivate interest. Questionnaires are frequently used to arouse interest, to obtain pertinent information about specific problems, to determine understanding and attitudes regarding the use of money, and to serve as a basis for democratic planning of a unit by members of the class.

When the unit is studied, committees of students are frequently organized to visit local banks, savings and loan associations, real estate offices, insurance companies, and investment securities offices. The committees interview officers of these institutions and prepare reports for the class. Or the entire class may make a field trip to one or more of these organizations.

Speakers from various financial institutions may be invited to visit the class as a supplement to teacher and textbook. Supplementary teaching aids are obtained from various sources.

EXPERIENCE GAINED

Students frequently organize their own banks, savings plans, or insurance companies, in this way getting valuable experience in how such organizations operate. Or they may take on the financial management of some school activity, such as a dance, bazaar or field trip.

Sociologists do not exaggerate when they say that being able to handle money successfully is one of the requisites for happy marriage, for good relationships with children, and for a meaningful life in one's community. Fortunately, this ability is not beyond the reach of any one of our citizens; they need only a few basic skills and an understanding of what money is and what it is for. These skills and this understanding can be taught. There is no better place to teach them than in our secondary schools and no better time than now.

Salaries go to \$8000 in West Hartford's

CAREER SALARY PLAN

EDMUND H. THORNE

Superintendent of Schools
West Hartford, Conn.

IN AN effort to reward those teachers who remain in the profession and give outstanding service to the schools and community, the board of education at West Hartford, Conn., has recently put into operation a "career salary plan."

Features of the plan include three steps of \$400 each beyond the normal maximum for teachers who hold bachelor's degrees and three steps of \$500 each for teachers who hold master's degrees or higher degrees.

The present normal salary maximums in West Hartford are \$5400 for teachers with B.A. degrees, \$5800 for those with M.A. degrees, and \$6100 for those with M.A. degrees plus 32 credits beyond the M.A. By recent vote of the board of education, these have been raised to \$5800, \$6200, and \$6500 respectively, effective March 1. This means that superior classroom teachers may attain salaries up to \$8000.

Adoption of the plan by the board of education in November 1953 followed a five-year study by a committee of teachers and principals selected by members of the staff. The proposals of the committee were accepted by the board, with one exception. In an effort to be democratic and gain staff support, the committee had proposed a central evaluating committee, composed of teachers, to select candidates for the "career" classification. The board of education, on the other hand, felt that this was entirely a problem for the superintendent and his administrative staff. Since the plan has been adopted, many committee members, as well as other teachers, have expressed their satisfaction with the procedure adopted by the board, stating that they would prefer to be judged by the administrative staff rather than by their own peers. Evaluation, therefore, is done by a central committee composed of members of the adminis-

trative staff appointed by me as superintendent.

To be eligible for the "career" classification, the teacher must have been at the normal maximum for at least one year. Nomination may be made by the teacher's principal or any group of three teachers. If a teacher is not nominated by his principal or colleagues, he may request that he be considered. In all cases, the teacher's consent is necessary if he is to be considered for the "career" award.

Criteria have been established, and evidence to support the recommendation is required by the central committee. These criteria and the weighting that is given to each of the groups are:

1. Skill as a classroom teacher (30 per cent):

Has unusual skill in teaching techniques, creative and original; is continually seeking to improve methods.

Has gone beyond the salary requirements of the board of education to improve himself as a teacher.

Is well acquainted with recent research in child growth and development; knows how children grow and develop and makes good use of his knowledge.

Has thorough and deep seated knowledge of the subject he is teaching and keeps his knowledge up to date.

Is able to obtain high level of achievement, considering pupil's maturity and capacity for learning.

2. Pupil-teacher relationships (25 per cent):

Is kind, patient and understanding of children, has real interest, and is sympathetic and just in dealing with them.

Inspires children to do their best and be their best; develops in them the ability to assume responsibility and

share in planning and carrying through activities.

Has demonstrated his willingness and ability to work with pupils in activities before and after school.

Gives willingly of his time to help pupils make up class work missed or to stimulate and assist them in carrying out projects outside of class hours.

Has created a friendly and wholesome relationship between teacher and pupil. Pupils admire and respect the teacher as a person.

3. Staff relationships (20 per cent):

Accepts responsibility for the well-being of the school.

Is ethical in all professional relationships; is an inspiration and help to fellow teachers. Commands their respect.

Has true professional attitude; seeks to advance the cause of education and the teaching profession. Is active in professional associations.

Works to improve education in West Hartford and makes real contribution. Assumes responsibility for committee assignments and so forth.

4. Public relations (15 per cent):

Is genuinely interested and actively participates in various community activities.

Is a leader in interpreting and establishing good school-community relations.

Develops constructive relations between home and school.

5. The teacher as a person (10 per cent):

Demonstrates soundness of character, is honest and sincere, and adheres to high moral principles.

Has a deep faith in and appreciation of our American way of life.

Is open-minded, happy and tolerant in outlook on life and is emotionally stable; gets along well with others.

Is well versed in contemporary affairs; shows interest in things outside his own field of specialization.

It is recognized that no one is perfect enough to satisfy completely all the recognized characteristics for superior teaching. It is expected, however, that teachers selected for the "career" classification will satisfy most of them to a reasonable degree.

The plan first became operative with the beginning of our new fiscal year, March 1. In its first year of operation, 20 persons were nominated by their principals and one by three of his fellow teachers. In the final selection 13 teachers were recommended by the committee and approved by the board of education and me. These 13 constituted approximately 20 per cent of the eligible members of the staff who had reached the maximum. Conscious of the risk involved in initiating such a new program, the committee spent a great deal of time reviewing the records of and evaluating each person nominated. Every effort was made to choose persons about whom there would be no question. The committee was unanimous in its final selection. Names of persons selected were published in a staff bulletin.

In accordance with the adopted policy, a candidate not selected has the right to know the reason if he so desires. If he is not satisfied with the decision, he may request the board of education to review the facts.

INCREASE NOT PERMANENT

The voted increase over the normal maximum amounts to \$400 or \$500 per year, dependent upon the degree held. It is not a permanent increase but will be good for three years. At the end of this period, the committee will have to consider whether this same amount shall be continued for another three-year period or if the teacher will be granted an additional \$400 or \$500 as provided in the second step.

Early in November each teacher at maximum and eligible for the award is requested to submit to his principal detailed information regarding honors he has received, a record of his participation in community activities, and so forth. Examples of the questions that are asked are:

What have you done beyond the salary requirements of the board of education to improve yourself as a teacher, acquaint yourself with recent research on child growth and develop-

ment, or discover and apply better teaching techniques?

What have you done beyond your normal teaching activities to improve education in West Hartford, such as work on professional committees, e.g. curriculum guides, cumulative records, reporting systems, and so forth.

What constructive things have you done to establish good community relations and to interpret the schools to the citizens of West Hartford—to establish better relations between the home and school?

This document is used by the principal to supplement information in his own files and to make sure he has not overlooked any pertinent facts that should be considered by him in making his nominations.

RECOMMENDATION SUBMITTED

The principal then submits his recommendation to the central evaluation committee. For each person nominated, he supplies factual information on each item in the criteria. He answers such questions as:

In what way does this person show unusual skill in teaching techniques?

In what way has this teacher demonstrated his interest in children and how has he shown patience, sympathy and understanding in dealing with them?

Show how this teacher gives of his time to help pupils make up class work missed or to stimulate and assist them in carrying out projects outside class hours.

In what way does this teacher accept and share responsibility for the general well-being of the school?

Accompanying his recommendations are exhibits of any significant data that will give further support to the nominations.

Recognition of superior teaching in West Hartford is nothing new. For more than 25 years the salary schedule has included a merit increment plan. In the beginning, a "merit" teacher received \$100 in addition to his regular increment. In 1947, this was changed to be a double increment. A teacher at the fifth step would normally advance to Step 6. If he is granted a merit increment, he would be advanced to Step 7. This increase is therefore permanent and accelerates him on the schedule.

The adoption of the "career" plan merely carries the merit award plan a step farther by including teachers who have reached the maximum. It also attempts to define more clearly

the criteria and make selection more objective.

The local teachers association has approved the idea. The only suggestions to date have been that the "career" classification be broadened to include the few nondegree teachers in the system and that the "career" steps be made uniformly \$500 each, regardless of degree held. The recent change in salary schedule, effective March 1, will incorporate the latter recommendation, but "career" awards will still not be available to teachers without college degrees.

There has been a distinct improvement in the morale and quality of work of the teachers selected for the "career" classification. Although they did not seek this special award, they are determined now to justify the confidence that was placed in them. There is also no apparent jealousy on the part of the staff members not chosen. Several have expressed joy that some of their colleagues were honored in this manner. School principals also report an increase in staff spirit since the adoption of the plan. Teachers are definitely trying to improve their practices; many are trying to take a more active interest in community affairs and are showing more interest in all school activities, perhaps in anticipation that they will be nominated sometime in the future.

SUPERIOR SERVICE REWARDED

West Hartford believes that it can continue to reward superior service successfully by such a plan. Naturally, revisions will be made from time to time as we gain more experience. We believe that the success of the plan so far lies in the fact that it was not something forced on the staff but was adopted after careful study and deliberation by the staff before it was considered by the board. The careful and open manner in which selections were made has established confidence. Much credit should also be given for the high professional attitude of members of the staff and the willingness on the part of teachers, as well as principals, to make the plan succeed.

The "career" salary idea cannot be used as a substitute for a poor salary schedule. Furthermore, we must continue to maintain a superior basic salary schedule. Our normal maximums must be at least equal to, if not better than, that of comparable school systems if the plan is to continue to enjoy the success it has had to date.



No Trained Teachers for Foreign Languages?

GEORGE W. BROWN

*Principal, Mamaroneck Junior High School
Mamaroneck, N.Y.*

**There may be people in the community
who speak a foreign language
and will be glad to teach**

IN MANY schools it's the problem of obtaining trained teachers that holds up the teaching of foreign languages in the elementary grades. School people are beginning to ask, "Why wait for youngsters to begin foreign languages until they are in high school? Why not take advantage of their natural powers of mimicry and their lack of self-consciousness before the children become aware of them?"

But the answer often is that there are no teachers who feel capable of tackling an other-than-English tongue. In Mamaroneck, N.Y., we found an answer outside our school faculty—in the P.T.A. and in the community.

Parent-teacher association members said they were interested and eager to assist in the formation of French and Spanish after-school clubs for the second and third grades as an experiment. With their assistance it was possible to find several native-born French and Spanish women willing and able to teach on a voluntary basis. Some of the volunteers had had teaching experience; others were without formal teaching training.

The first year the short club sessions of 30 minutes were devoted to the learning of French or Spanish songs, games and dances. During this time the children also learned additional words and phrases, such as those used in ordinary conversation. Soon it was apparent that these groups could, by the end of the school year, present complete French and Spanish assembly programs for their schoolmates, which they did with spectacular success and great pride. Preparation for their programs gave the children a concrete goal for which to work

throughout the year. Drop-outs from the clubs were at a minimum, for they were "fun" clubs with their games, dances and songs.

The second year, again with the cooperation of the parent-teacher association, two committees were formed, one of the Spanish speaking volunteers and one of the French speaking women. A young mother who had obtained her doctorate in Romance languages agreed to set up model elementary lessons in each language. Her lesson plans were studied by the volunteers; whatever changes they felt necessary were made so that the lessons would conform as nearly as possible to the idioms and vernacular of the appropriate countries. This tended to eliminate the stilted schoolbook phraseology and give the children a truly conversational approach to the language.

During both the first and second years of this program a German club was included. In the third year of the project, when it appeared that the demand for German was not so great as the demand for French and Spanish, the German club remained an after-school club, whereas French and Spanish classes became a part of the regular curriculum, continuing to be taught by volunteer instructors, with the regular classroom teacher present and responsible for her class. Uniformity is maintained by mimeographed lesson plans, which at this point are made up by the committee of volunteer teachers. The classes continue to be conducted on a "fun" basis, and assembly programs in French and Spanish are given, with the entire program devoted to games, dances and songs of French or Spanish origin.

During the third year of the program Spanish was dropped because of the illness of the teacher. A previous Spanish volunteer from a near-by community had to leave because her own school district asked her to give her time to teaching Spanish to the children of its elementary school rather than to the Mamaroneck Central School children. Although this was a great loss to Mamaroneck, it was, in a sense, a victory for our idea. This year we decided to have French classes only, largely because of the availability of teachers.

A parent-teacher association member is appointed to take charge of obtaining and scheduling volunteers. Several of the volunteers have no children in this particular school or have children who have been graduated; they remain because of their interest and a desire to help. Parental response to this particular project has been so enthusiastic that this year the parent-teacher associations of two other elementary schools in the Mamaroneck school system have inaugurated comparable programs in their schools. Throughout the program one basic tenet has been held: Only those who speak the language as a native language are used as teachers. As a result, the children develop nearly perfect accents, and the volunteer teachers are completely relaxed in the teaching situation because they are real authorities in their field.

The ultimate goal of this project has been to demonstrate that children learning French from French speaking teachers in the elementary school will be able to acquire a conversational ability in the language.

'Twas eighty years ago

WHEN MOTHER STUDIED PEDAGOGY

MILDRED E. WHITCOMB

MY MOTHER mastered the principles of psychology in two lessons. During the two class periods devoted to the nature and workings of the human mind, she was led on, by "inferential reasoning," to an understanding of the nature of knowledge itself.

Don't get the idea my mother was a mental giant. If she stood head and shoulders above Dollie Overstake and Hiram Stump it was in buoyancy rather than in brain. Mother and Dollie and Hiram were part of a class of 14 "scholars" at Miss Peck's private school for young ladies and gentlemen in the New West. Enrolled by their parents with Miss Peck, the students had pedagogy as their primary goal. School administration was an incidental part of the course as the graduates would administer, first, a one-room

school while teaching its eight grades and, eventually, might instruct in or head an academy.

At Miss Peck's school young people reviewed the subject matter likely to be covered in the state teachers examinations. They were counseled on school government. And they were promised for their tuition "that special preparation that constitutes teaching as a profession . . . that makes teaching a permanent business."

For mother the profession began to look alarmingly like a permanent business. She did not marry until "late"—she lacked four days of age 23 when she wore her wedding gown and three days of age 23 when she put on her plum colored "infare" dress, of which glamorous garment only the buttons remain. In a few years she was back teaching again, the family kitchen

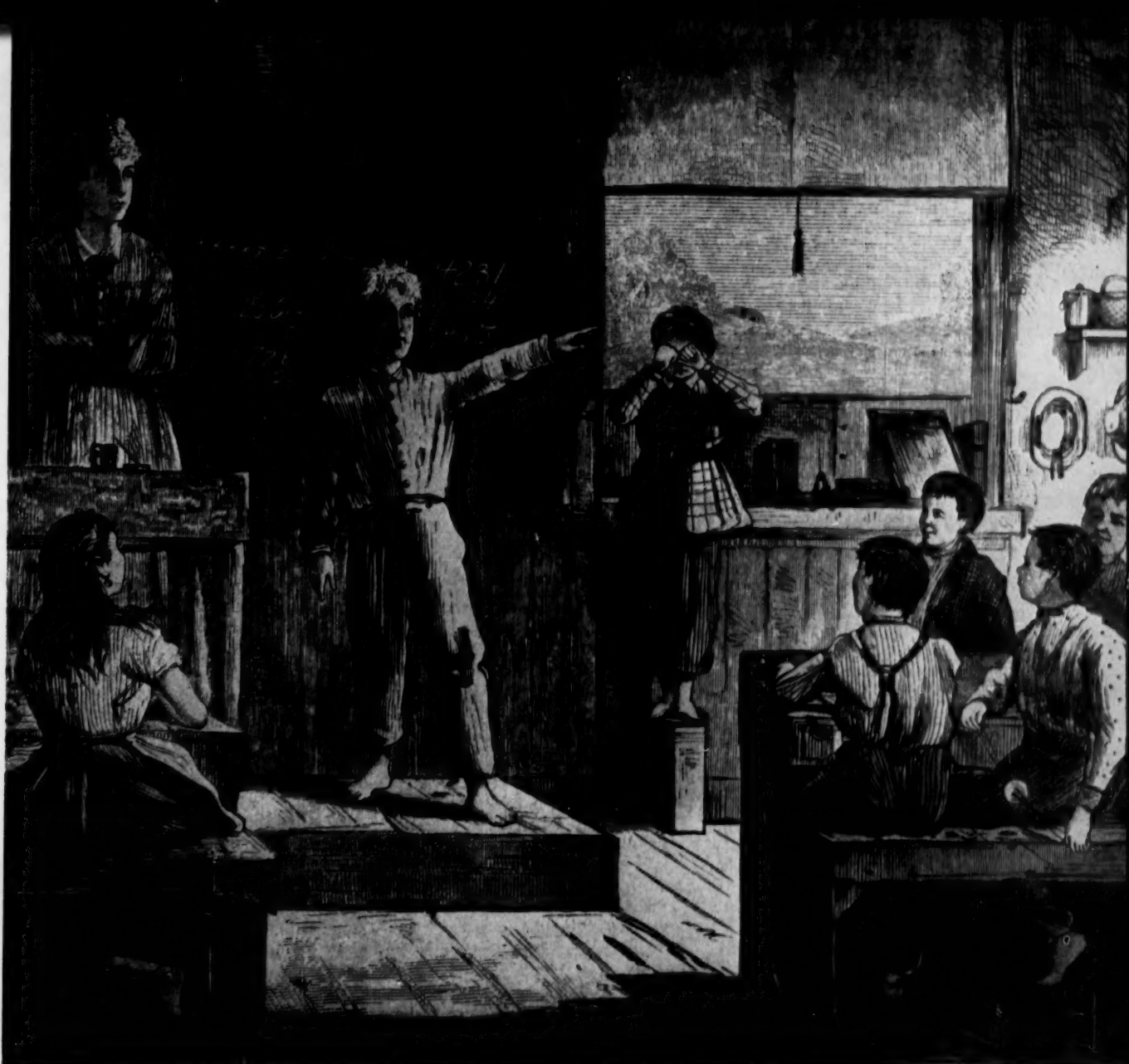
serving as kindergarten for her own offspring. We children learned the alphabet, manuscript writing, and simple spelling at 3 and 4, our chalkboard being a slate-gray flush door, which gave onto the back porch and the cistern pump.

The six months mother spent at Miss Peck's seminary learning to be a teacher constituted the school year 1874-75. Mother was 16 and a boarding student. On week ends she rode home with a classmate and neighbor, Buckley Bell, in "democrat" or bobbed, to the family's proud high white house four or five miles "north of the city."

The family had moved out of the old log house—whose main room had seven doors and a single window—the year mother entered country school at the legal age of 5. Mother wasn't

Lower half of a two-page center spread from Lizzie Bizer's Notebook, 1875. Only 16 pages deal with education.

1. Stand or sit erect. Standing is best.	
2. At signals move promptly, quickly & quietly.	
3. Give your entire attention to recitation.	
4. Be courteous to your teacher & fellow pupils.	
5. Answer in your own words.	Can answer the question.
6. Answer in complete sentences.	Disagree with an answer.
7. Raise your hand when you wish to criticize.	
8. Never speak without permission.	Wish to ask a question.
9. Speak in a medium tone distinctly & energetically.	
10. Never prompt. Be honest & independent.	



"To call forth in mental conflict all the powers of the pupil"—this was the sixth and final "object of the recitation."

happy at country school. Her early teachers gave her a dunce cap rating, and teachers' opinions in those days were intallible.

Then in 1869 the school director hired a man teacher, and this white haired, frock coated gentleman convinced mother she had a good mind and could learn easily if she put her good mind to it. This man teacher was not only discerning but he was learned and he was kind. Stern always, he regarded use of the rod as beneath the dignity of the true teacher and as destructive of the personality of the child. After that if mother's long wool-

ens concealed red stripes or bruises, they originated not on the recitation bench or for woolgathering but on a fast playground at lunchtime and during recesses.

Graduated into Miss Peck's school, mother began keeping a small notebook—the now faded cover a mottled red and blue—and in it she recorded the sum total of knowledge that she was being prepared to teach.

The central 16 pages of this notebook are devoted exclusively to Education. Much of the notebook consists of dates, dates, dates; long and stilted definitions; outlines and still more out-

lines. Education apparently had no history so that section of the notebook is clear of opposing columns. Nor is it strong on definitions of the "orthography" and "syntax" type. Outlines, though, are everywhere in staggered and staggering array. And surely nowhere could one find brackets more magnificiently embracing.

On the first day in pedagogy class it was appropriate that the students learn the objects of education, of which there were five worth recording:

1. To develop the human mind.
2. To strengthen the thinking faculties in every possible direction.

3. To render the acquisition of new knowledge easier and surer.

4. To increase the student's resources.

5. To make the student better able to deal with the useful affairs of the world.

Not too quaint, these objectives of 80 years ago! Nor the "total child" in the "total school" of course, as we quaintly say today. Nor is there mention of today's three C's—communication, cooperation and creativity—but later we shall find some of these implied.

In those days of floggings, parent-teacher fistcuffs, and pupil expulsions, it was conceived necessary to establish "school government" before attempting to teach. Miss Peck had a definition for this: "School government is the proper ordering of both the organic and individual action of the school, so as to secure in the pupils the best possible development of mind and discipline of the heart."

My mother, Dollie and perhaps even Hiram, each to be in charge of a room with pupils ranging from 5 to 21 years old, must have had qualms which this definition could scarcely quiet. But Miss Peck, as all teachers, taught by example as well as by definition. Moreover, most of her students had come up through ungraded schools and, wise to the ways of bullies and practical jokers, recognized the need of immediate firm and fair mastery of the classroom situation.

Let's return now to Miss Peck's educational psychology and philosophy before she escorts her students into some weeks of methodology.

The mind, we learn from the notebook, is cultivated by exercise. The

several branches of learning furnish this exercise. The mind embraces different faculties. The teacher can and must find the means to cultivate every faculty of the pupil. The Creator has given human minds different tastes. All these tastes must be provided for in the means of education. In youth the perceptive powers are strong; thus, in teaching, one must present first the concrete and then the abstract. Two sources of knowledge exist: the senses and the reason. Methods of instruction are therefore empirical and rational. The human mind distinguishes objects in kind. Instruction must be quantitative and qualitative.

That was about the extent of it at Miss Peck's school in '74 and '75. And yet a great deal had been said.

OBJECT OF THE RECITATION

"Today we shall consider the Object of the Recitation," we can imagine Miss Peck saying to her 14 students, once psychology and philosophy had had their due. "The object of the recitation is sixfold:

"To stimulate the pupil to earnest and thorough preparation.

"To test the pupil's preparation and to correct his faults.

"To instruct the pupil and to direct his efforts.

"To teach the pupil to apply what he learns.

"To train pupils to clear, concise and connected expression.

"To call forth in mental conflict all the powers of the pupil."

After they had memorized by rote the object of the recitation, the students of pedagogy were given some points on how to conduct a recitation:

1. The recitation may be oral or written.

2. Pupils may answer individually or in concert.

3. Pupils may be called on consecutively or permissively [*sic*].

4. The recitation may be conducted by questions or by topic.

5. Reports, discussions and lectures are in place.

6. The reciprocal method may be used in all recitations.

7. The teacher may combine recitations in large ungraded schools.

8. Diagrams should be used whenever appropriate.

9. Classification should be made of every subject that will permit it.

A teacher, of course, is hired to "direct" the pupils, Miss Peck reminds the Fourteen. Children, first of all, must learn the decorum of the classroom. They are not at home any longer; this is School, and School has rules:

1. Stand or sit erect. Standing is best.

2. At signals, move quickly, quietly.

3. Give your entire attention to the recitation.

4. Be courteous to your teachers and fellow pupils.

5. Answer in your own words.

6. Answer in complete sentences.

7. Raise your hand when you: (a) can answer the question; (b) disagree with an answer; (c) wish to criticize; (d) wish to ask a question.

8. Never speak without permission.

9. Speak in a medium tone—distinctly and energetically.

10. Never prompt. Be honest and independent.

There are those today who would contend, justifiably, that the Nineteenth

In pioneer days not all primers were for juveniles. But these two illustrations are from the American Juvenile Primer, 1838.



The pretty little Bird.



Going to the Fields.

From Old-Time School Books by Clifton Johnson, Peter Smith, 1935.

Present for a Good Scholar.



A Reward for Good Conduct.

Instructor.

Teacher's praise was hard won. Esteem could be expressed by a Reward of Merit, given for "diligence and attention to study, and good behavior."

Century view of education brought about its own typical behavior problems, that autocracy is the father of defiance and rebellion. The regimentation of moving on signal, "quickly," has vanished with the stove, the twin outhouses, and the fixed seating. Being honest and independent is now a probability for the modern school child because he is free. He isn't being watched every second; he is responsible to himself and his classmates as well as to the teacher. Being free, he is not in conflict with the teacher, with "school government," or with adult society. "No dictation, no dishonesty"—is it as simple as that, one wonders?

GOING BACK OR FORWARD?

After a few weeks of methods, the class of '75 now goes back for a day's review of some fundamentals of education. Under "Elements of Knowledge, Informal" in mother's notebook, Miss Peck puts forth ideas that, 80 years later, are not yet universally applied.

"You must provide the children with opportunities for exercising their senses." [Is this learning by doing?]

"Children must have their appetite for knowledge gratified." [Does this include extra rations for the gifted?]

"Especially see to it that children are furnished occasions for applying their powers of knowing what is true, beautiful and good." [Is this teaching the moral and spiritual values?]

"See that the children have facilities for practice in the elements of all the arts." [Work space, activity centers?]

Going forth to teach is a venture in idealism, in Miss Peck's book and mother's notebook. Miss Peck was

forever trying to build teacher personality, to foster moral character. Here are her "Eleven Directions for the Teacher":

1. Bring to the recitation vigor and buoyancy of body and mind.
2. Prepare for each recitation. Bring gems and sunshine to the class.
3. Be energetic, enthusiastic and full of inspiration.
4. Let your words be few and fitly spoken.
5. Speak in low, earnest and cheerful tones.
6. Be kind, impartial, firm.
7. Arouse and direct the best efforts of the pupils.
8. Maintain self-possession and proper dignity.
9. Let all your words and acts be worthy of your profession.
10. Be deliberate and patient but secure the utmost dispatch and vigor.
11. Seldom repeat the question. Never repeat the answer.

NO DYING ON THE VINE

Miss Peck was determined that her future teachers keep on improving their minds. She had methods for that, too: (1) observation; (2) reading; (3) lecture going; (4) meditation and study, and (5) conversation.

No formal graduate study was available or anticipated, but some of that generation who made a profession of teaching and who followed these five enticing paths attained a mellowness of mind and had a conversational sparkle that no Ph.D. degree can guarantee.

That about sums up Education, but it says a lot if Miss Peck's "scholars" were able to realize the full implica-

tions of her instructions. I never met anyone who had gone to school to any of Miss Peck's graduates, including my mother. I can only judge by my own private kindergarten experience beside the old gray door. Mother, eternally at her ironing board or cook-stove, was a patient and buoyant teacher, sparkling with "gems" and "sunshine." Most vociferously was she buoyant in reciting verses. Their number, quality and subject matter still seem limitless, and they were delivered with the "vocal culture" and "gesticulation" she had learned in Miss Peck's companion course on Elocution.

Here's what her little notebook says about Tone in Reading:

"Pure tone is a clear, smooth, sonorous flow of sound and is usually accompanied with middle pitch. It is used to express the emotions of Joy, Love and Tranquillity.

"Orotund tone is full, deep sound and pure tone adopted to express sublime and pathetic emotions.

"Aspirated tone is not a pure vocal sound but a forcible breathing utterance and is used to express amazement, fear, terror, anger, revenge and fervent emotion.

"Guttural tone is a deep-seated under-aspirated tone of voice, used to express aversion, hatred, loathing and contempt."

All these tones—tranquil, sublime, fearful, contemptuous—mother used in reading stories and reciting rhymes to her children from cradle through rocking chair and on to horse-and-buggy-ride days. As many of the stories and poems came from McGuffey's Readers I through VI, their morals were elevated, their literary value occasionally high.

As for the physiology and anatomy section of the little notebook, only a first-year medical student today could cope with its complexity. In the Seventies people may have been short on psychology but they were long on their internal workings, including the devastating effects of alcohol upon the liver.

Old King Alcohol it was who removed mother from the permanent business of teaching. One Sunday she pinned the white ribbon of temperance on the high buttoned jacket of a strange young man. From that moment he was as good as "pinned" for life. So mother's six months' preparation in pedagogy at Miss Peck's seminary was soon to be a loss to the profession. Today not even she remains—only the fading notebook.

THREE TYPES of ADMINISTRATIVE OPERATION



1. Chain of Command

Illustrations from 1955 A.A.S.A. Yearbook

The Administrator and His Staff

A.A.S.A. Yearbook Reviewed by GERHARDT E. RAST
Superintendent of Schools, Westport, Conn.

STAFF RELATIONS IN SCHOOL ADMINISTRATION. *Thirty-Third Yearbook of the American Association of School Administrators, N.E.A., 1201 Sixteenth Street, N.W., Washington 6, D.C., 1955. \$5.*

STAFF relations in American schools operate generally within the framework of line and staff organization. For some years there has been a growing tendency among teachers and administrators to ask searching and challenging questions about the customary line and staff operation.

Questions like the following are typical: Does it provide the conditions under which teachers can use fully their increasing knowledge and skill? Is its basically authoritarian nature in conflict with the fundamental premises in the tradition of American life? Does it recognize that the teacher today is well trained compared to the teacher of the period when the traditional line and staff organization was instituted? Does it allow best use of existing knowledge of the forces which motivate human behavior and productivity? Is it conducive to the development of individual and staff

potential? Is it superior to any other known organization in promoting attainment of the school system's goals? Is it conducive to the growth of staff morale? Does it make use of the unique abilities and special knowledge of individual staff members? Does it foster staff improvement through application of the generally accepted laws of learning?

These are, in all likelihood, some of the questions that prompted the choice of subject for the 33d yearbook of the A.A.S.A. The 1955 yearbook commission, faced with the task of defining and illustrating staff relations for today's schools, realized that whether or not traditional school administration should be liberalized was no longer an issue. Today's issue is how far and in what form it should be modified away from authoritarian and toward cooperative procedures.

The commission decided, in dealing with this issue, to direct its efforts first toward defining cooperative administration and second toward describing the factors, principles and methods involved in its operation.

The yearbook was prepared on the premise that interest in the emerging

structure of school administration is not confined to administrators but is also found among teachers, school board members, and citizens generally. Industry with problems of staff relations similar in many ways to those of the schools has worked and is working intensively on the issue with which the yearbook deals. Consequently the commission prepared the book with a wide and varied reading public in mind.

ADMINISTRATION DEFINED

The first chapter of the yearbook deals in a fundamental way with what administration is and what kind of structure or form it may take to establish staff relations on a cooperative basis. This chapter is the key to the entire book, and without a careful reading of it the value of the other chapters is diminished.

Administration is defined as a "means of bringing about effective cooperative activity to achieve the purposes of an enterprise." It is necessarily a way of working with people. Today three distinct types of administrative operation can be observed with their varying degrees



2. Committees Rampant



3. Shared Responsibilities

and quality of cooperative activity. At one extreme is found the "chain of command" operation in which there is little cooperative effort. At the other extreme is the operation described as "committees rampant" in which the simplest decisions become matters for group debate and in which "everybody does everything." The third operation is described as "shared responsibility" in which "group decision and teamwork reinforce individual responsibility."

The third operation, located between the two extremes of cooperative involvement in administration, provides the substance for the yearbook. In fact, if lengthy book titles were fashionable, the book might have been entitled "Cooperative Administration Through Shared Responsibility as a Means Toward Better Decisions, Growth of Persons, and Increased Effectiveness of Schools."

Chapter 1 continues its definition of administration by identifying and describing the nature and functions of administration as planning programs and activities, allocating resources, stimulating effort, coordinating activities, and evaluating effects. It completes the definition by indicating a structure for cooperative work. The principles underlying the structure, the kinds of cooperative activity which capitalize the creative capacities of individuals and facilitate productive group effort, and the guideposts toward creating a structure for cooperative work are presented here for the thoughtful consideration of all who grapple with the problem of increasing both the degree and the quality of cooperative staff relations.

With the exception of the concluding chapter, which stresses mainly the challenge presented to American education by opportunities for cooperative staff relations, the remaining nine chapters describe and illustrate the principles and methods of cooperative administration. Six chapters are devoted to the improvement of the following administrative tasks through shared responsibility: provisions for individual growth, working conditions, economic and community status of the staff, conduct of fiscal affairs, school-community relationships, and personnel procedures. The forces that motivate human behavior, factors that affect group work, and methods of evaluating the quality of staff relationships are the subjects with which the three remaining chapters deal.

HOW FAR "COOPERATIVE"?

The yearbook may be of particular interest to those who have pondered long and hard on the question of how far and in what form setting goals, planning, decision making, and evaluation should move away from authoritarian to cooperative activity. The commission does not provide a universally applicable blueprint in answer to this question. In fact, there can be no such blueprint since administration, in order to be effective in the attainment of the school's goals, must change in structure and organization with changes in the situation within which it operates. It is also true that the administrative structure and organization must vary to meet community situations.

The commission does propose guidelines, principles and illustrations

that can be of assistance in the creation of administrative structure for cooperative work. Such structure can become vital and productive if the persons for whom it defines duties and responsibilities share in its creation. The commission, in the belief that the time has come when cooperative staff relations can be a significant power in the development of good schools, expresses that belief in the following words:

"Victor Hugo once said that the most powerful force in the world is an idea whose time has come. The time has come when a program of human relationships may give education the power it needs to play its part in helping man to control himself. The great challenge that faces the school administrator is to build the best possible relationships with the staff—relationships which will release the great creative power that a good staff can generate. When this challenge is effectively met, education will be bringing to bear the full force of its potentialities upon society."

Members of the yearbook commission are Henry I. Willett, superintendent of schools, Richmond, Va., chairman; Lura Bennett, high school teacher, Raton, N.M.; Francis S. Chase, chairman, department of education, University of Chicago; Willard S. Elsbree, professor of education, Teachers College, Columbia University; Melvin Gruwell, superintendent, Fremont County Joint School District A-215, St. Anthony, Idaho; Charles B. Park, director of special studies, Central Michigan College of Education, Mount Pleasant; Gerhardt E. Rast, superintendent of schools, Westport, Conn.; N. C. Turpen, superintendent of schools, Fayette County, Lexington, Ky.; Edward M. Tuttle, executive secretary, National School Boards Association, Chicago, and Louise Weller, principal, Benjamin Franklin School, San Diego, Calif.

Thirteen school areas served by

Public Library Bookmobile

ELWOOD E. DYKE

Principal, Southport Elementary School, Kenosha, Wis.

LLOYD G. MEROW

Principal, Wilson Elementary School, Kenosha, Wis.



Elementary school children enter the bookmobile during its bi-weekly visit to their area (above). The interior of the trailer library (below) includes shelf space for 3000 books, plus the librarian's counter. Photographs are by Harold K. Yerkes, instructor at Lincoln Junior High School.



THE Long, Long Trailer" carries a unique connotation for the pupils of the outlying schools at Kenosha, Wis. It no longer means only the movie of that name but also the library that rolls in on wheels every day at a different school. Bookmobile Day has become a very special day, bringing Homer Price, Storm-along, Kit Carson, and many other favorite heroes to the boys and girls.

The Kenosha public library staff, superintendent of schools, and library board had long been aware that there were many persons who did not have ready access to public libraries. In 1950 a survey was conducted, with the assistance of the Wisconsin Free Library Commission, which revealed that many segments of the city population were not making use of library facilities. The survey showed that persons residing outside a mile radius of a city library were withdrawing only a few books.

Investigation showed that poor transportation facilities and busy intersections were a deterrent to traveling more than 10 city blocks to a library. Even though teachers encouraged children to use the libraries, parents objected to their children's crossing busy streets.

The commission sent a bookmobile unit to Kenosha for a two-week trial period to service the outlying area. The response was most enthusiastic, with a large increase in circulation. After the departure of the bookmobile many of the citizens continued drawing books from branch libraries. A request for permanent bookmobile facilities was frequently made. A bookmobile was therefore recommended for use in this city. Members of the library staff visited several other cities that were operating bookmobiles and found they were functioning well.

In the meantime, a partial solution was found through the sending of book kits to schools, but experience proved that the kits did not offer children a wide enough selection of materials. The kits were circulated twice a year, resulting in gradually waning interest on the part of the children.

In October 1953 the library board requested from the city council money for the purchase of a bookmobile and truck. The appropriation was approved, and the bookmobile was purchased and put into operation on June 30, 1954. Built at a cost of \$6000, this attractive gray, red trimmed trailer and truck began its rounds to 13 areas near public and parochial schools. The trailer, 40 feet long and 8 feet wide, has 375 feet of shelves holding a total of 3000 volumes. An additional 7519 volumes are held in reserve to provide a complete change of books every two weeks. Two doors facilitate easy exit and entrance to the trailer. The librarian's counter is located at the front of the unit. Heat is furnished by an oil space heater, and light is provided by a gasoline motor driven generator.

The areas are served every two weeks. The bookmobile remains at each location until 5 p. m. to give adults an opportunity to draw books. The length of time the bookmobile spends at a site depends on the school population. Fifteen minutes is allowed each class. A librarian is in charge of the bookmobile. She and two clerks help the children select and check out books.

Do the librarians of the mobile library enjoy their work? Miss Brown says: "From open house to the present the response has been wonderful. Each day is a new experience, never monotonous and always satisfying. We hope the response will continue and grow, necessitating another book trailer for Kenoshans."

Statistics indicate the value of the bookmobile: 1625 children and 172 adults who never had cards before have requested them and draw books regularly; 55,018 books were withdrawn in the first six months of operation; 3700 children use the library regularly.

The bookmobile has proved most effective: It can be parked anywhere, in school yards, parks or at the curb of a street. More trailers can be provided, to be moved by the same truck.

Just what are the advantages and values of the mobile trailer? It would seem that dispersing books to young-

sters has many related values. The children learn to take the responsibility of caring for books. There is also the pride of selecting their own books that they can read. Many of the children have never been in a library before, and thus they are gaining library experience that will be of value to them when they have access to larger facilities.

The children have the opportunity to use their own initiative in gathering supplementary information to aid in their classroom activities. Teachers also appreciate the fact that additional materials can be obtained to broaden the background of the pupils.

The best way to teach children to read is to provide for them an environment filled with a variety of interesting books at various levels of ability. Having access to books has given boys and girls an opportunity to read at home as well as in school. The personnel in the mobile library helps in many ways—by choosing books that the youngsters can read easily and by bringing books the children want.

The mobile library has provided more tangible evidence to the children that they are living in a growing community where people are working together in a community project to help everyone enjoy life through reading.

Federal Government Has Bigger Stake in Schools

EUGENE BENEDETTI

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E DUCATION is a function of the state. It is incredible that a problem of such magnitude received no specific mention in the federal Constitution.

Several factors may have dissuaded the national founders from making specific reference to education, such as: (1) the predominantly private school backgrounds possessed by the constitutional fathers, (2) the conspicuous absence of a national precedent elsewhere, (3) the prevalence of powerful states' rights factions at the constitutional convention, (4) adverse geographic characteristics with resultant inadequate systems of communication and transportation which promoted decentralization, or (5) the belief that sufficient authority to administer public education was contained in the implied powers of the federal government.

Any intention the federal government entertained relative to the administration and supervision of public education under implied powers vanished with the adoption of the Tenth

Amendment to the Constitution of the United States, which affirms: "The powers not delegated to the United States by the Constitution nor prohibited by it to the states are reserved to the states respectively or to the people." The national government is endowed only with enumerated powers. Since education was not specifically designated as a federal function, the Tenth Amendment has been interpreted as granting the individual states plenary control over the administration of public education.

No state function has been more successful in resisting federal encroachment than education has. Never has a state service been so diligently guarded against any semblance of national centralization as education has.

Despite this seemingly impregnable wall protecting such an essential state function, an appraisal of Article I, Section 8, the general welfare clause of the federal Constitution, might conceivably show weaknesses in the basic structure, thereby rendering federal intervention possible. Article I stipu-

lates, "Congress shall have power to . . . provide for the common defense and general welfare of the United States."

During World War II, the national government by necessity embarked upon an extensive program of education. Unfortunately, the educational services thus provided were the functions reserved to the states under the stipulations of the Tenth Amendment. Sufficiently alarming was the realization that educational deficiencies attributed to inequality of educational opportunity were responsible for the deferring of approximately 660,000 inductees. Thus, a large potential fighting force was immobilized by illiteracy at a crucial time when our national existence was seriously challenged. These circumstances were allowed to develop at a time when the national government should have been devoting its undivided attention and available resources to the annihilation of a menacing enemy. Actually, considerable funds and energy were expended to perform a task that legally was a function of lower political subdivisions.

EDUCATIONAL PROGRAM ORGANIZED

Fortunately, time was not an essential factor. Gradually the international struggle developed into a war of attrition, and the manpower situation grew alarmingly acute. Our available reservoir was steadily being depleted.

The federal government had but one alternative: to organize, as rapidly as facilities permitted, an educational program of minimum essentials to enable the educationally deficient to become useful members of the armed forces. At the conclusion of the training period 85 per cent of those deferred for educational reasons were declared literate and subsequently were inducted for military service.

This condition was not an exclusive feature of the second world conflict. The situation has grown progressively worse. For example, in 1953 troop education was extended to 170,000 men, of whom nearly 70,000 received fourth and fifth grade certificates. These circumstances exist when the need for highly qualified men is increasing because of complex new weapons.

Progress and evolution since the termination of World War II have materially altered the situation to place a premium on the "common defense." Vast technological develop-

ments responsible for the introduction of the atomic era no longer permit countries to mobilize national strength after the outbreak of hostilities. Conceivably an atomic war could terminate within a matter of hours. Push button warfare, characterized largely by an abundance of intercontinental guided missiles armed with atomic warheads, has revolutionized technics of destruction.

Never before have education and national security been so closely associated. These developments show the need for commensurate progress in education. Complicated equipment requires lengthy preparation for its effective operation and maintenance. Education is charged with a twofold responsibility. First, education has an obligation to assist in training technicians capable of launching modern implements of war. Second, during the current period of international dissension, intrigue and misunderstanding, education has the responsibility of teaching the humanities so as to foster universal cooperation, with emphasis on human dignity and individual worth.

Let us consider the second aspect of the issue under consideration, "the general welfare of the United States."

"Expenditures for Education at the Midcentury," a report from the U.S. Office of Education, showed significant disparities in amounts expended by states for the support of public education. These variations undoubtedly affected the quality of educational offerings. For example, the report showed the median expenditure per classroom unit for the school year ending 1950 to be \$4391. However, amounts spent varied from \$7627 in New York to \$1451 in Mississippi. The situation in Mississippi was similar to that throughout the southern region where eight states spent considerably less than \$3000 per classroom unit.

DISPARITIES REVEALED

Invariably the disparities revealed a shorter school year, lower teachers' salaries, greater pupil-teacher ratio, and lower current expenses per unit of average daily attendance in the southern states. Indisputably, these extreme factors exercised a pronounced influence over educational programs of the entire area.

These inequities bear a definite relationship to the general welfare of the nation. Undesirable sectional dif-

ferences cannot be restricted to the area in which they are nurtured. The general welfare of the nation must be viewed in its total aspect. Prevailing interdependence and complete lack of self-sustaining areas render the isolation of backwardness impossible; it has adverse effects on the entire nation.

Another item closely allied with national welfare is the recent Supreme Court decision repudiating segregation in the public schools of the United States. Some states, despite traditions to the contrary, are making conscientious efforts to abide by the court dictum of desegregation. Other states are tangibly defiant, resorting to subterfuge to continue the principle of segregation. In extreme cases objections have been expressed in the form of student strikes and riots. These occurrences, too, have a direct influence on the general welfare.

POWERS GRANTED TO CONGRESS

We can no longer afford to remain callously indifferent to realistic situations. After all, providing for the common defense and promoting the general welfare are powers expressly granted Congress. Article I was conceived during a period characterized by the social acceptance of involuntary servitude and by the belief that geographic barriers such as oceans provided unlimited protection from foreign invasion.

We must recognize the inextricably interwoven relationship between education and national security and the noteworthy responsibility education possesses in advancing the general welfare. The federal government has currently grasped the opportunity to establish and administer schools in connection with the armed forces. It must be remembered that these schools were not created to offer instruction in technics of war. These institutions were conceived to impart minimum essentials, which is obviously a state function.

The future of this federal project is contingent upon the educational activities of the respective states. Significant improvement and extension of our state controlled public school system could minimize the danger of federally administered schools. Continued inadequacies will result in the stabilization or possible expansion of the national program or conceivably will lead to more direct federal intervention in school administration.

IT HAS been a long time since public education has been so vigorously challenged by private education as it is being challenged now.

Whole states are considering the elimination of their public schools as a result of the segregation decision by the U.S. Supreme Court. Scattered voices outside these states are saying that public education has become too great a burden for the public and that we should return to private education.

Enrollments in private elementary and secondary schools have been increasing since the depression of the Thirties. About 12 per cent of the enrollments of elementary and secondary pupils are in private schools.

It is estimated that from 30,000,000 to 40,000,000 adults in the United States engage each year in some form of systematic education. Most of these are enrolled by private agencies. Only a tenth of them are enrolled in the public schools.

Quite as important as these developments is the evolution of education in our public schools and colleges that is essentially private or that compromises public and private interests.

In most of the states, adult education in the public schools is a largely private enterprise, the students paying for the courses they choose to take.

Studies in various parts of the country have shown uniformly the high cost of the "hidden tuition" that must be borne privately if one is to attend a public school.

Some enterprises in the public schools are conducted wholly at private expense, sometimes with pride that no tax money is used.

Though the Morrill Act establishing the land-grant colleges and universities provided that tuition in them should be forever free, these institutions have been increasing at a rapid rate the fees charged their students.

There is increasing reliance on gifts from parent-teacher organizations and other sources in financing school costs. Especially in the public colleges and universities, public and private funds are mixed with an abandon once unthinkable.

Food for school lunches is provided from the public treasury for public and private schools alike. Veterans may attend either public or private colleges at public expense. Federal grants for research are made to public and private colleges.

In some states the agricultural extension services of the land-grant col-

Are We Returning to Private Education?

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leges and universities are tied legally to a particular farmers organization.

Portions of our public schools and colleges serve unabashed the interests and demands of particular groups. Medical schools are largely controlled by doctors, engineering schools by engineering societies. Professional educators expect schools of education to serve them, not the public. Vocational education enterprises in the public schools have become closely linked to the occupational groups they serve.

Athletics in the public schools seem to be conducted primarily to entertain the groups that enjoy sports.

Private grants and public grants from noneducational agencies are used increasingly in the research programs of these institutions. There is serious talk of providing scholarships in pri-

ivate colleges and universities from state funds, rather than extending the facilities of the public institutions.

Teachers are more and more compelled to engage in part-time work outside the schools to supplement their earnings, so that their loyalty is divided between the public schools and their private concerns.

We do not have clear-cut conceptions of the respective rôles of public and private education. This is not surprising. For two-thirds of the time white men have lived here, private education has been the prevailing kind of education. If education is broadly conceived, there is still far more private education than public education. Some believe that public education should have only a limited place in our total scheme of education.

Should adult education be conducted wholly at private expense?



Emily Griffith Opportunity School, Denver

When public education was first developed in this country, there was a strong conviction that it should be provided for the benefit of the public and should be paid for by the public. As late as 1918, Charles H. Judd wrote, "American schools are what they are because they are free," and pointed out that the arrangements for free education had "not been attained without much discussion and much legislation." The words "free" and "public" used to come in the same breath.

A study of the opinions of 23,928 citizens, most of them parents, by the Michigan State Department of Public Instruction has shown that many of them are not interested in paying taxes to provide some of the functions now carried out by the public schools, though they are willing to pay for the performance of some other functions that the schools commonly neglect.

We should be developing a concept of the public or common school suited for our times. We may decide that the concept the founders of the public schools had is the one to which we should hold, but that the education required for the public benefit and provided at public expense is different now than it was when the public schools were founded. We may conclude that we should provide some kinds of education in public schools largely or wholly at private expense or that we should provide financial aid to private schools. Whatever we do, our decision should be deliberate; we should not drift into a situation in which we had never intended to be.

When we have arrived at a modernized concept of the public school, it should be reflected in our state and national constitutions, our state and national laws, and our school district policies.

CONSTITUTION NEEDS AMENDING

The most rapid progress would be made if we were to concentrate first on an amendment to the Constitution of the United States which would define the rôle of public education and the place of the federal government in it. The Constitution was adopted before we had a public school system. The common interpretation of the Constitution is that it leaves public education to the states, but the federal government has always participated in education through its own agencies and through grants to the states. We can anticipate that it always

will and that, as the importance of education to the national welfare is increasingly recognized, it will participate more extensively.

Most of the state constitutions are similarly outdated. Some of them are almost impossible to change. Some are so easily changed that they reflect the whims of the current legislatures, rather than an enduring and defensible philosophy of education.

Until we get better models in the nation and the states, we can expect that the thousands of independent boards of education will provide every kind of public school the mind can conceive. Variety in public education is desirable, of course, but surely there are some guiding concepts.

Modernizing our concept of public education with due consideration of the basic ideas that were originally included is a major task of our generation. Unless we perform it, we can expect that our ideas about the nature of public education will degenerate until we can see no real differences between public and private education. In some communities that point has been reached.

ARMED WITH DEFENSIBLE CONCEPT

Once a defensible concept of the rôle of public education has been accepted, there will be plenty of situations in which to use it.

We could use it in deciding how school buildings are to be used. We are torn now between opening buildings to indiscriminate private use and reserving them for education conducted under school auspices.

We could decide whether adults are a part of the public that is entitled to public education at public expense.

We could determine whether it is proper for the schools to be aligned with the power groups of their communities.

We could view anew the implications of increasing the private costs of education in a nation where the median income per family is \$2700 and the number of children per family increases as income decreases.

We could review the education and qualifications of teachers and administrators to determine whether they are sufficiently educated about public affairs and sufficiently concerned about the public welfare to work in public schools and colleges.

We could estimate more accurately the costs of public education and set about raising the needed funds.

We could decide where to draw the line in the expansion of public education. Lacking such a line, public education is in danger of becoming all things to all men.

We could decide whether it is proper for professional educators to determine goals and policies for public education or whether we should try to get lay citizens to bear the principal responsibility for such decisions.

We could better judge whether it is desirable for the schools to cultivate the interest of parents and hope for lethargy about school affairs on the part of other citizens, except when there is money to be raised.

We could decide whether a public school enters upon a wholly different relationship with its students when the period of compulsory attendance ends. Is it to be regarded as a public school for students required to attend but a quasi-public or a private school for those beyond the permissible age for leaving school?

We could see more clearly the function of professional educators in developing in their students an understanding of their privileges and responsibilities in attending a public school. Perhaps we would oftener remember that the public has objectives in conducting and paying for its schools, instead of considering that the only objectives of public education are the objectives of students and teachers.

It appears likely that, if we should deliberate about the nature of public education, we should decide to avoid every temptation to dilute it with practices proper in private enterprises but inappropriate in public ones.

Private education has a historic and an honored place in American life, but its place is outside the public schools. To an alarming extent, it is developing in the public schools. Private interests in education should be expressed through the private schools, not through the public schools.

The best general principle to follow appears to be the one our forefathers followed. Public education is conducted for the benefit of the public and is therefore provided at public expense. Activities that cannot be justified as beneficial to the public should be eliminated from the public schools and colleges; activities that can be justified should be financed by the public. And the public, not the profession, should determine the public interest in public education.

SO YOU think your public relations program is complete?

Yes, it's true that a nicely printed or mimeographed monthly bulletin goes out to a carefully selected community mailing list; there are stories in the newspaper every week; several community groups are permitted to use school facilities periodically; there is a "parents' night" once a semester, and, of course, the teaching staff is aware of its responsibilities in school-community relations.

But how much good will is lost by such a tactless letter as this:

Dear Mrs. Smythe:

This is to report damage that occurred in the girls' lounge following the meeting of the girl scout troop of which you are sponsor.

As you may know, the equipment in the lounge is placed there for the benefit of *all* students, and when members of a group prove destructive everyone suffers. Vandalism of any type has no place in a community school.

As you undoubtedly know, a lamp was broken last Friday evening. Please remit \$7.80 to the business manager, Centerville High.

Hoping to hear from you in the near future, I remain,

Actually, there is little reason the head of the civic organization should read farther than the first few words of the preceding letter; it is most untactful. However, in the following letter the explanation comes early and the over-all tone of the letter is courteous:

Dear Mrs. Smythe:

Because you are the troop leader of the girl scout group which met in the Centerville High School lounge, I am writing to tell you of a little accident that occurred.

As you may know, one or more of the girls inadvertently knocked over and broke a lamp. With youngsters, incidents of this nature are likely to occur. However, the school usually asks the group to pay for minor damages which it has caused. We are sure you can understand our position.

If you find it convenient, please remit \$7.80 to the school business manager. If there are any questions, or if my understanding of the facts is not completely correct, I would appreciate hearing from you.

Certainly the foregoing letter would be accepted by any fair-minded person. The other letter would arouse resentment.

Each week hundreds of letters or notes leave every school system. They go forth from the administrative offices, the teachers, the counselors, and a dozen other sources. They are

Make Your Public Relations Letter Perfect

NORMAN BRUCE SIGBAND

Associate Professor of Education
De Paul University, Chicago

directed to parents, suppliers, local business and civic organizations, other schools, members of local and state governments, and to the personnel of the system itself. Every single letter *can and should* build better public relations.

There are several factors that one should keep in mind while writing an effective letter:

1. Use a "Natural" Tone. Throw out such trite, stereotyped phrases as: in regard to, beg to state, your favor, please advise, hoping to hear from you. These are frozen-faced, whiskery expressions that were in vogue in the early 1900's. To use them today reflects a lazy, unorganized mind. It is really an affront to the reader.

Be natural. Write the way you speak. Dictate or write your letters the way you would talk to the individual were he sitting across the desk from you. Sound sincere, sound personal, sound friendly, sound human.

2. Be Tactful. Sometimes we are not as careful in this respect as we should be. All of us find it difficult, when an irritating situation arises, to maintain our courtesy and equanimity, but in our communications we *must* be tactful at *all* times.

In addition, we must treat certain little phrases with care because of the connotation and interpretation the reader may give them. Here are a few statements that might well be eliminated from our communications:

"If you will read the school regulations, you will be able to . . ."

"I was surprised that you did not see . . ."

"In your letter you claim . . ."

"We believe you can understand . . ."

"You have failed (or neglected) to specify . . ."

These are just a few of the many phrases that can easily be misconstrued by the reader if not presented properly by the writer.

3. Accentuate the Positive. The advice given in the ditty of a few years ago ("accentuate the positive; eliminate the negative") has much merit. Why talk about "dissatisfaction," "trouble" and "mistakes," when the more acceptable positive approach can be utilized? If it isn't necessary, why arouse an unpleasant association in your reader's mind? Note in the following examples how a negative statement may easily be made positive.

NEGATIVE	POSITIVE
We hope to avoid errors.	We will complete the work efficiently.
We believe you will not be dissatisfied.	We feel you will be satisfied.
We hope your child won't have any trouble.	We feel that your child's work will prove satisfactory and enjoyable.
We will hold up the results until after January.	We will release the information immediately after January 1.

4. You Are Interested in YOU. Yes, you are, and everyone else is interested in himself. Advertisers in America learned long ago that to sell

their product they had to tell the prospective purchaser how the item would benefit the buyer. John Jones is not interested in how Consolidated Motors will benefit if he buys a Zippo Eight; Mr. Jones wants to know how *he* can gain. Examine the two letters below, and note how the first is concerned with the school's point of view while the second sees the problem through Mrs. Sawyer's eyes:

Mrs. R. T. Sawyer, President
Westridge Women's Club
Westridge, Ill.

Dear Madam:

In reference to your letter of recent date, I regret to tell you that it will be impossible for your group to use the Westridge High School auditorium for the benefit play on March 18.

If we were to permit every group in the area to use it, we would find it difficult to schedule our own functions. Furthermore, the cost to the school in additional insurance and janitorial help would be difficult to handle. Therefore, you see why we find it impossible to honor your request. From time to time community groups do use school facilities, but arrangements must be made far in advance.

Sincerely yours,

Mrs. R. T. Sawyer, President
Westridge Women's Club
Westridge, Ill.

Dear Mrs. Sawyer:

Thank you for your recent letter. It is always a pleasure to hear from one of the civic groups of Westridge.

As you are aware, the Westridge High auditorium is sometimes utilized by various community groups. However, reservations for the use of the hall are normally made with the school board two months prior to the expected day of use. This permits the board to make satisfactory legal arrangements and also permits the school insurance company to make such examinations as are necessary before accepting or rejecting the reservation. By following this procedure, your school may take advantage of low insurance rates. All these steps are necessary to keep school costs down to the lowest possible figure so that you and other community members may enjoy an effective and safe educational system for the children of Westridge.

May I suggest that in the future you make your plans early and communicate with Mr. Lyons, school board secretary. If there is anything that your school can do for you, please call on us; the staff and I will be happy to assist.

Sincerely yours,

The second letter makes an effort to show Mrs. Sawyer why the policy is carried through and how she and other community members can benefit. It is always difficult to include a "you attitude" in a refusal letter, but

certainly you *can* exclude an icy, formal and tactless approach. Notice in the foregoing "Dear Madam" letter the refusal *precedes* the explanation. Is there any point in "Madam" reading past the refusal? Hardly. But when an explanation is made *first*, then the refusal may be implied; it is not necessary to say, "therefore, we cannot," "thus we must refuse," and "you can see that it is impossible." When an explanation is given first, and the refusal is *implied*, then a statement like, "Therefore you can appreciate our position" is a reasonable one to make.

How would you obtain a "you attitude" in a letter asking the reader to vote for the coming school bond question? Would you be wise to tell these 10,000 prospective recipients about the age of the present buildings, the new facilities proposed for faculty lounges and dining rooms, the new machine shops worked out with the aid of industries in the area, and the relatively small cost per year to the citizen for the next umpteen years? Wouldn't it be wiser to emphasize how the *readers'* children will benefit and how the *readers* themselves will enjoy the use of the shops during certain evenings, use of the pool on occasion, and an auditorium for the use of the citizens' organizations? Show him you are sincerely interested in *him*; it's simple psychology involving statements that we all like to hear from time to time.

Now that a few of the basic letter writing principles have been explained, here are a few of the many possible occasions that arise where a letter may be used profitably.

Letter Writing Opportunities.

There are a thousand and one opportunities for educators to build good will through brief, courteous, sincere notes. Just a few suitable comments are listed here:

From chief administrator to new teaching, clerical and custodial staff members: welcome to the school system, a statement on the salary schedule, miscellaneous factors, and an offer to assist the new employee whenever necessary.

From chief administrator to regular school staff: sent out at the beginning of the school year with a brief sketch of the plans, a sincere pledge of cooperation, and an expression of confidence in the work that will be done during the year.

Greetings during a holiday season (Christmas or Thanksgiving).

A note sent out at the close of the school year, in which the staff is thanked for its cooperation.

Letters to individual teachers in recognition of a job well done, whether in the school or in the community.

From chief administrator to community members: a communication of appreciation to those community members who are working with school groups or in any cooperative school-community area.

From chief administrator to service club officers: information to maintain close liaison with city officials and with the Lions, Rotary, Kiwanis and other service clubs regarding school plans, bond issues, scholarships, use of school facilities, and combined school-community events.

From chief administrator and teachers to parents of exceptional children: a short note occasionally to the parents of children who are superior or who are retarded. It is wise to recognize outstanding performance, and just as important to let the parents of the children on the other end of the scale know of the school's interest.

From teacher to parents: The parents of each child should hear from that child's instructor at least once each semester—a brief note commenting on Tommy's adjustment or ability (positive, not negative).

A note should also be sent offering sympathy when a death, severe illness, or other misfortune occurs in the student's family.

From assistant principal or class sponsor to entering or graduating students: a short letter conveying the best wishes of the school staff and offering assistance.

From public relations director to community officials, the local press, and various organizations: Numerous occasions arise when the use of a brief communication concerning school activities of many different types will result in favorable publicity.

These are just a few of the many possible situations that constantly arise where a short, personal letter will build a great deal of good will. There are a thousand others; seize them, utilize them, and profit by them through effective writing; the result will be better public relations with staff members and the community.



New \$4,700,000 secondary school plant on wooded site in Dearborn, Mich.

EDSEL FORD SENIOR HIGH SCHOOL

Teachers, Students and Laymen Define the Program

GEORGE E. MILLS

*Assistant Superintendent, Division of Senior High Schools
and Community College, Public Schools, Dearborn, Mich.*

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The Architect's Plan for the Physical Facilities

WALLACE B. CLELAND

*Eberle M. Smith Associates, Inc.
Architects and Engineers, Detroit*

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Common Learnings Integrated With Vocational Program

How committees arrived at answers to 25 questions

Told by GEORGE E. MILLS

Assistant Superintendent of Schools, Dearborn, Mich.

THE planning of a new senior high school presents a rare opportunity to examine critically the existing instructional program. Dearborn, Mich., capitalized upon this opportunity by launching a systemwide secondary curriculum improvement program at the same time the planning committee for the Edsel Ford Senior High School began its work. In a very real sense this planning of the new building involved the total staff of the division of senior high schools and of Henry Ford Community College.

This article presents a brief description of the activities of both programs and a detailed discussion of specific problems encountered in the planning of the building.

The curriculum improvement program began with a study of the needs and interests of the Dearborn youth and community, and of youth and society in general. Next, a tentative philosophy for secondary education and objectives for secondary education in Dearborn were established.

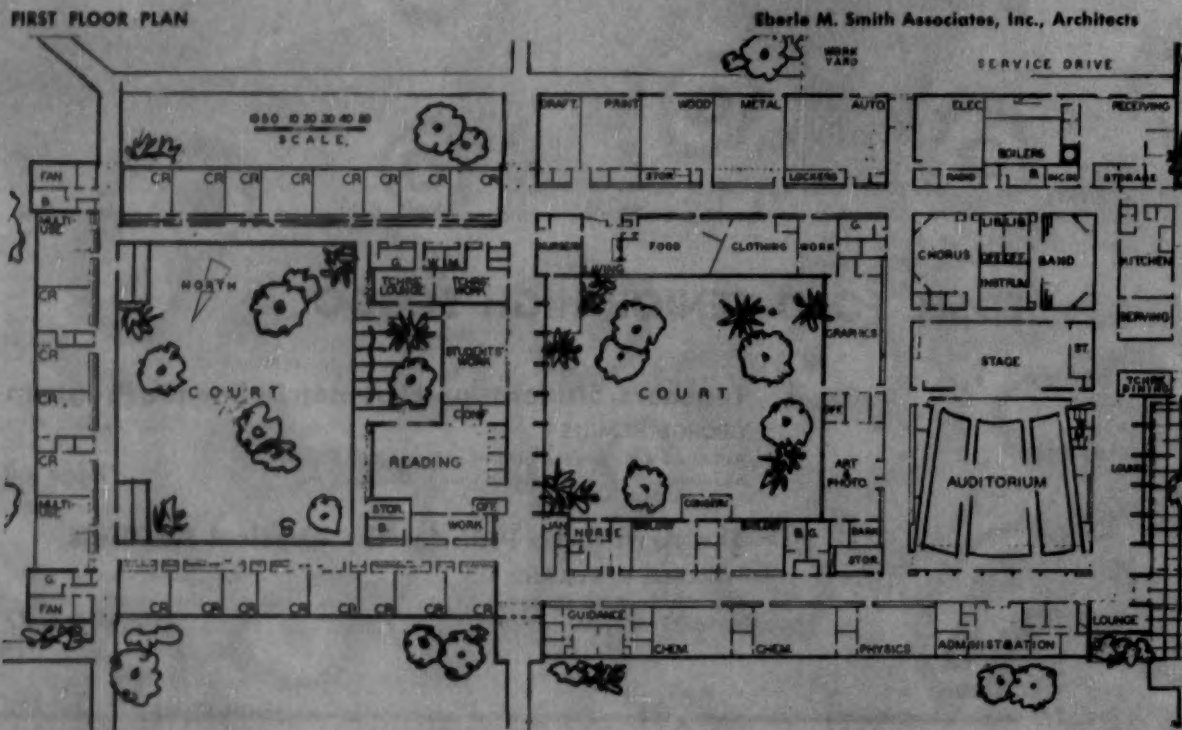
The staff agreed to the principle of a basic education or common learnings program for all youth to be integrated with a specialized learnings (vocational) program. Further, the total staff committed itself to determine the what and the how of both the common learnings and specialized learnings programs.

During this period, the all-city school advisory committee of some

forty-five citizens representing labor, industry, business, parent-education and civic associations studied (independently of the teacher group) the problem of secondary education in general and in Dearborn specifically. After four months of biweekly meetings, this committee officially affirmed *its* desire for a common learnings program and a specialized learnings program.

It was in this matrix of self-scrutiny, research and study involving all secondary teachers and representative citizens that the first planning activities for the new school were launched.

The building planning procedures and policies established by the board of education called for a teachers plan-



ning committee and a citizens planning committee. The teachers planning committee consisted of 44 teachers and administrators who were highly involved with the curriculum improvement activity. It represented all subject areas and each of the existing three senior high schools and the community college. This committee was charged with developing the *educational specifications* for the Edsel Ford Senior High School.

The Dearborn planning rationale calls for three phases: (1) *the educational specifications*, defined as a written statement of the educational objectives, activities and facilities needed for the total instructional program in the school building; (2) *the preliminary plans*, defined as the architect's various solutions to the *educational specifications*, and (3) *the final plans*, defined as the working plans and specifications prepared for bid purposes and the contractor's use.

The 40 members of the Edsel Ford citizens committee were predominantly residents of the new school's attendance area and represented the area's parent-education associations and the civic associations. However, six members were representatives of the all-city school advisory committee; they resided in other areas of the city. The principal functions of the citizens com-

mittee were (1) to review and react to the developing *educational specifications*, and (2) to collect and to disseminate information throughout the community.

Among the valuable contributions of the citizens committee was the construction of a searching questionnaire on the curriculum and the building facilities. Some 7500 questionnaires were distributed. The approximately 3000 returned reaffirmed the common learnings and specialized learnings approach to senior high education in the Edsel Ford area.

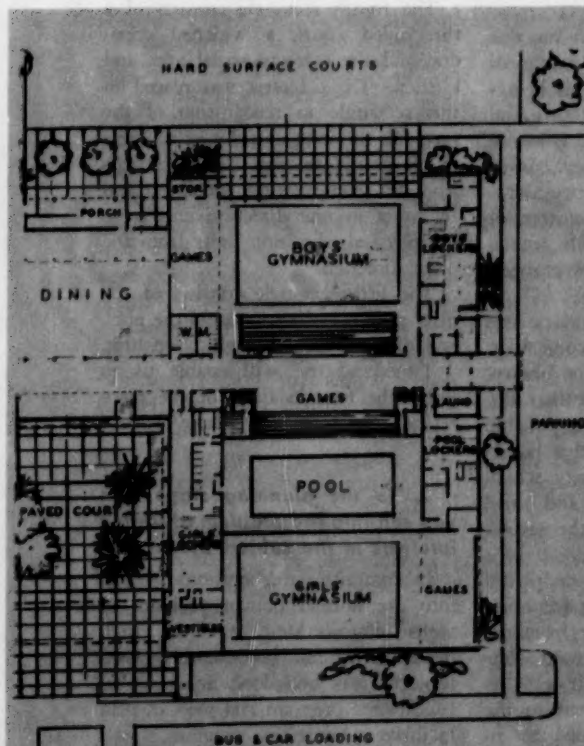
CENTRAL PLANNING COMMITTEE

Board policy further provided for the deliberations of the teachers and citizens planning committees to be submitted to the central planning committee for approval and recommendation to the superintendent, who, in turn, made recommendations to the board of education for its final decision. The central planning committee consisted of the superintendent of schools, the assistant superintendent in charge of secondary education (who served as chairman of the teachers committee), the assistant superintendent in charge of business and finance, and the director of school planning.

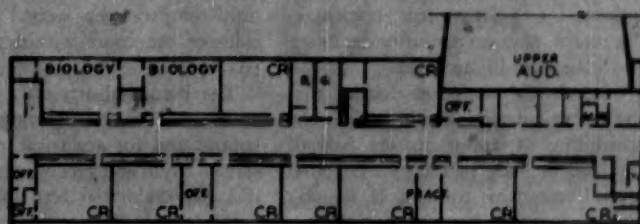
To further energize the planning committees in their quest for flexibil-

ity and adaptability, it was Dearborn's good fortune, as the educational specifications were about to be completed, to receive a substantial grant from the Fund for the Advancement of Education of the Ford Foundation. This grant enabled Dearborn to send 26 experienced teachers to the University of Chicago to study secondary education intensively for a six months' period. Further, the grant has enabled these teachers to spend the afternoons of last school year and this school year in workshop activity for the purpose of designing the common and specialized learnings programs specifically for the new school before it opens next September.

The specific purposes of the Edsel Ford-Ford Foundation Curriculum Project are: (1) to investigate at the University of Chicago and elsewhere basic developments regarding human development, psychology of learning, theories about curriculum development, instructional methods, and organization of instructional program; (2) to reexamine all data available concerning the Dearborn students and community; (3) to examine our present secondary instructional program; (4) to try ideas in teaching situations during 1953-54 and 1954-55; (5) in light of the foregoing to organize the Edsel Ford school curriculum, and (6)



THE MAIN MASS of the building is on one level, which permits the use of lighter weight materials in construction and also allows the use of glass block top lighting in the classrooms. About 50 teaching stations are toward the east side of the plan, and only the five physical education teaching stations and the recreational areas are in the west portion. On the left is the quiet court, around which are grouped the more academic classrooms and the library. In the middle is the activity court, particularly used by the biology and art and photography classes. The paved social court-student forum at the right is the student meeting place. It is adjacent to the student lounge and to the dining room (in which student dances are also held). Here, too, is the public entrance for functions held in the auditorium and gymnasiums.



SECOND FLOOR PLAN

to aid in the long-term improvement of the systemwide secondary school curriculum.

Members of this Edsel Ford-Ford Foundation curriculum project were all involved in the general curriculum improvement program, and many were members of the Edsel Ford teachers planning committee. While members of the project group were in Chicago many significant changes in the building's plans were effected as the result of their study. When the project group returned to Dearborn to continue its work on a half-day basis, the teachers remaining on the project became the nucleus for the Edsel Ford faculty and by tacit agreement of all concerned they supplanted the original teachers planning committee.

VITAL STATISTICS

The Edsel Ford Senior High School consists of 55 instructional spaces to accommodate an optimum enrollment of 1200 students and a possible maximum enrollment of 1800 students. This is based upon an optimum class size of 25 students and a maximum class size of 37 students with an 85 per cent room utilization.

The \$4,700,000 budget for the total facility is as follows, though actual expenditures will vary:

Site	\$ 15,000
Building	3,583,601
Architect's Fee	179,180
Equipment	537,540
Site Development	225,000
Reserve	159,679
TOTAL	\$4,700,000

Following are the planning committee's answers to 25 basic questions:

1. What determined the relationship of the various building units?

Two ideas forced consideration of the building's traffic pattern. First, certain areas, it was agreed by the committee, would often be used independently, such as the cafeteria-social area, auditorium, music and art rooms, industrial arts department, homemaking rooms, physical education facilities, and classroom-library area.

Second, the committee decided that the over-all design should permit the scheduling of approximately half of the student body in the general classroom-library unit for half of the day and the same students in special facilities during the remainder of the day.

The other half of the student body would reverse this procedure.

After testing out many traffic patterns, the committee concluded that rectangles placed side by side would permit the most effective flow of traffic. This decision raised the issue of single-loaded or double-loaded corridors. A previous decision to reduce costs by designating a 9½ foot ceiling dictated the borrowing of natural daylight for classroom use from the corridor, and this made feasible a single-loaded corridor for the classroom-library rectangle, with the court walls of glass.

The general classroom-library unit was placed at one end of the building, away from through traffic and the noisier activities. Here are classrooms for English and social studies, the library or instructional materials center, the teachers' workroom and lounge, a curriculum center, and a creative arts work area.

The next rectangle contains the two-story double-loaded corridor section of the building. The counseling and guidance unit is located in the front of the building and on the ground floor. The health unit is across the corridor. Science facilities occupy classrooms on both sides of the first floor, the natural science classrooms with their conservatory and the court horticultural area being located along the court side.

Administrative offices are on this front corridor as near the center of the building as possible. This brings them close to the main entrance and near, but not adjacent to, the guidance and counseling center. They consist of offices for the principal, two assistant principals, and the registrar or attendance officer, along with general office and storage space, a workroom, and the vault.

The language, mathematics and commercial units, on the second floor, are in closer proximity to the library-instructional materials center than they would have been in other possible locations. The art unit, the homemaking unit, and the nursery school unit comprise the second and third sides of the court within the second rectangle.

The industrial arts unit was placed at the rear of the building for noise control and for accessibility from the service drive and receiving room. Further, the industrial arts unit with its auto shop facility is adjacent to the area that may be developed as an

off-the-street driver training unit. This arrangement brings the arts, the homemaking, and the industrial units into close relationship.

The fourth side of the court consists of a glass wall that forms the corridor along the library and the creative arts workroom.

The auditorium and the instrumental and vocal music facilities constitute the third rectangle in the design. Music facilities are placed along a corridor separating them from the back of the stage. This gives easy access to the stage for rehearsals or public performances and will provide a necessary sound barrier between the music unit and the stage unit. Just beneath the stage, in the only basement area to be used for anything except mechanical equipment or storage, are the dressing rooms. Across the hall is the art room, handy for the preparation of stage sets, and close by is the clothing laboratory, where costuming is done.

At the back of this rectangle and across a corridor from the music facility are the receiving room and the boiler room. The service drive and turn-around terminate beside these three facilities. Further, the receiving room and the boiler room are as centrally located in the over-all design as possible. The flow of traffic from the receiving room for the distribution of supplies is ideally planned.

The fourth rectangle consists of a three-sided court, a widened corridor, and the cafeteria-social area and kitchen. The cafeteria was placed in this rectangle in recognition of the fact that the long corridor at the rear of the building will draw students from the homemaking, industrial and art units in one direction and from the physical education units from the other direction.

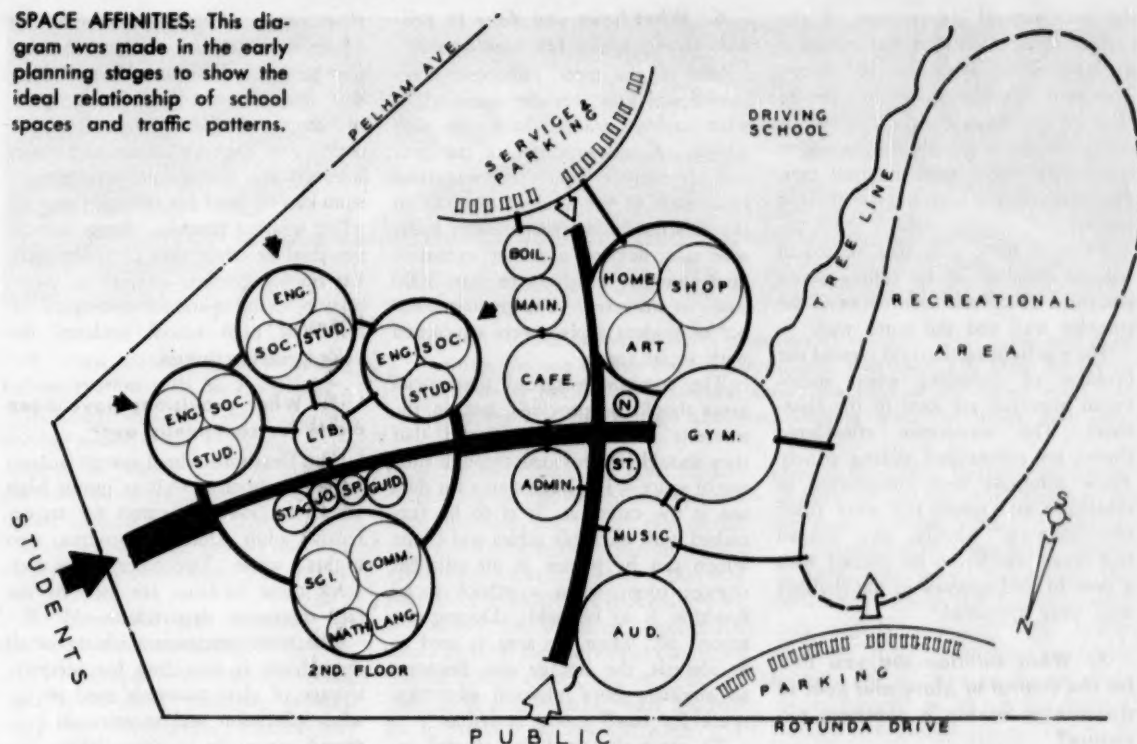
The fifth rectangle consists of the girls' physical education unit, the pool, and the boys' physical education unit.

Time and use will enable us to judge the functionalism of the theoretical relationships we have worked out.

2. In the planning stage, did you run into the problem of vested interests in the subject areas?

In committee deliberations we ran into the normal human problem of vested interests. Members of the group needed to think beyond their own subject areas and look at the total educational program and then to plan facilities to house that program.

SPACE AFFINITIES: This diagram was made in the early planning stages to show the ideal relationship of school spaces and traffic patterns.



Help came from the systemwide secondary curriculum improvement program that was under way at the same time. All the staff members, through reading, using resource people, and pooling their own training and experience approached their problem from a broader base than subject areas, through the following process: (1) determination of tentative philosophy, objectives and direction; (2) preparation of a curriculum inventory stating the general objective for a given class for a year, the course content with its specific aims, and the instructional activities and materials used; (3) analysis of the curriculum inventory; (4) investigation of the research on the nature of the learner, nature of society, psychology of the learner, and the conclusions of both generalists and specialists; (5) preparation of resource guides, and (6) evaluation of the total instructional program.

The interaction of our total faculty in this process has helped to reduce the conflicts of vested interests.

3. Why did you decide on a predominantly one-story building for the high school?

At the time this decision was made, evidence of experience in other com-

munities seemed to be ambivalent. It could be shown that one-story buildings were cheaper than two-story buildings, and vice versa. It further could be shown that some communities had designed the same facilities in both one and two-story buildings and built them for the same cost. Impressive vested interests appeared for each solution.

The architect pointed out that the cost of placing physical education facilities, the auditorium, the lunchroom, and the industrial arts facilities on the second floor would be excessive and that these facilities in total constituted from 70 to 80 per cent of the total square footage of the building. However, the architect did think he needed some additional height to balance the auditorium and gymnasium. The committee accepted the architect's statement and considered what could go on a second floor. The commercial, language and mathematics teachers had no objection to being housed there. The solution to the problem, then, was to design a two-story section of the building to house these three units and achieve the architectural balance.

For the remaining classrooms the committee felt, as did the architect, that the cost of a two-story building

in terms of reinforced concrete stairways and toilet facilities was higher than the cost of a one-story building; therefore, the general classroom-library unit was built as a one-story section. It was also believed that the one-story solution would make possible better control of traffic. It is interesting to note that the discussion was so exploratory that studies actually were made to show the difference in energy expended for stairway walking and corridor walking.

4. Why did you employ top lighting?

In the search for less costly but still adequate classrooms, the committee explored many possibilities. One was the abandonment of the bilaterally lighted room with its sloping ceiling, ranging from 9 to 16 feet in height. Since investigation revealed that substantial savings were involved in the specifying of a level 9½ foot ceiling, the committee unanimously agreed to specify it. This, however, created the problem of adequate natural light on the corridor side of the room.

While adequate artificial light would be provided for evening and for supplementary use, the committee felt that artificial light should not be used in place of daylight. At this time,

the architectural department of the University of Michigan was releasing its research on a new skylight unit. This unit is composed of a series of glass blocks, each designed to admit north and low angle south light but to reject high angle light and heat rays, thus promising a high degree of light control.

Three of these units to a classroom will be installed in the ceiling about one-third of the distance between the corridor wall and the outer wall.

The top lighting decision created the problem of darkening when audio-visual materials are used in the classroom. The committee considered shades on rollers and sliding panels. These solutions were constructed in miniature and tested but were ruled unsatisfactory. Finally, two hinged half-doors which can be pushed with a pole to fold upward in the skylight well were approved.

5. What solution did you find for the control of glare and heat in classrooms having a southern exposure?

Apparently there is no really adequate solution. We considered dusk light, the outside fixed venetian blind, the overhang, glass block, and, finally, a heat and light diffusing curtain made of fiber glass. We installed this curtain in an occupied building and found it effective in reducing glare and heat. Moreover, it was more flexible to adjust and cheaper to maintain than either an overhang or exterior venetian blinds. Accordingly, all south classrooms will have a second ceiling track for the heat and light-diffusing curtain in addition to a track for audio-visual darkening.

6. What have you done to provide living space for teen-agers?

One of the most important committee activities was the assessing of what students wanted in a new high school. A subcommittee of the general committee and representatives from each of the student councils in the existing high schools, after many meetings, devised a rather extensive questionnaire, which more than 3000 students answered. The greatest number of student replies were concerned with social areas.

The committee agreed that social areas should be provided, but, in the interests of economy, believed that they should be provided through dual use of space. The largest area for dual use is the cafeteria. It is to be furnished with stackable tables and chairs which can be placed in an adjacent storage room when a school social function is to be held. During the school day, when the area is used as a cafeteria, the storage area becomes an auxiliary boys' physical education space for small group activities.

To meet the need for several informal gathering spots for students, the corridors along the cafeteria and between the boys' and girls' gymnasium have been widened to provide space for noontime activities. Another wide corridor along the side of the auditorium will serve for small group activities.

Still another informal area is in the general classroom-library wing. The corridor along the library and creative arts room has been widened to serve as an auxiliary library seating facility and for other informal activities. The two multipurpose rooms in the general classroom wing, the

classroom in the guidance-counseling center, the creative arts room, and certain portions of the homemaking and art facility will lend themselves to informal social activity. The two courts and the one three-sided court between the auditorium and gymnasium can be used for informal activity when weather permits. In these various dual or triple uses of space there has been a genuine attempt to incorporate "living space for teen-agers" in terms of high school students' developmental activities.

7. What provisions have been made for community use?

The Dearborn school system utilizes its high school as well as junior high school facilities as centers for an extensive adult education program two nights a week. Two other nights each week these facilities are used by the city recreation department.

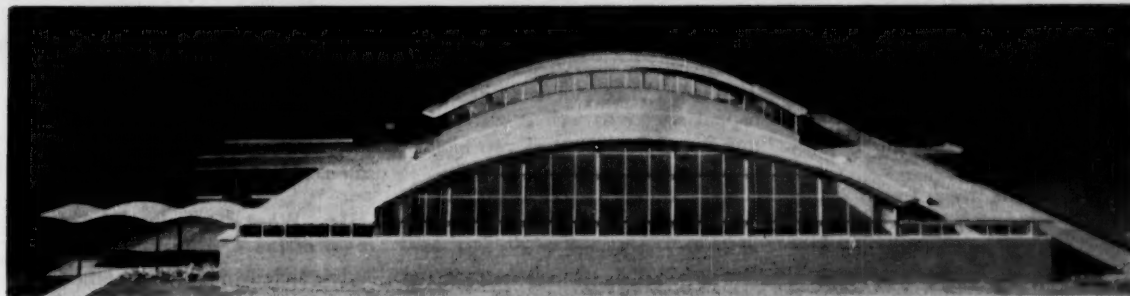
The most persistent problem in all the schools is providing for adequate storage of class materials used in the adult education and recreational programs, especially in homemaking, industrial arts, creative arts, and physical education.

While it is true that there is no provision in the new building for community rooms or parents' rooms, the committee believes that the multipurpose rooms, the creative arts area, the library in the general classroom-library unit, and the homemaking, industrial arts, and music areas are suitable for a variety of community uses. The physical education facilities, the auditorium, and the cafeteria, which can be converted to social use, constitute the major part of the planning of areas to be used by community groups.

Since classroom furniture and equipment is to be movable and in some cases stackable, it will be possible easily to rearrange classrooms for general and special use to meet the different adult uses of the various areas.

THIS MODEL is cut through the dining room, at the left, and, on the right, the repetitive arches of the main entrance canopy. In the middle foreground is the social court-student forum. Beyond is the high thin shell concrete vault of the boys' gymnasium. In the middle is the low top lighted swimming pool, and on the right is the girls' gymnasium. Both of the gymnasiums have clerestory lighting on all four sides, which gives their thin shell concrete roofs an appearance of "floating" above them.





8. How extensive a communication system will be installed?

An intercommunication system was deemed essential, and the architect was directed to provide it. The committee completely rejected the two-way public address system. The architect also was asked to install television cables in all classrooms.

9. How did you provide for audio-visual instruction?

Various committee members had used audio-visual materials in their respective classrooms. Others had used them in the "audio-visual room." Ensuing discussion revealed that the moving of a class to the "audio-visual room" causes a large number of obvious problems that often outweigh the benefit of using the audio-visual materials.

An analysis of the comparative costs of building an audio-visual room and equipping each classroom for audio-visual use was made. In general, the typical "audio-visual room" is planned to house from 40 to 50 students and is considered the equivalent of one and one-half instructional spaces. The anticipated average cost of each instructional space was fixed at \$60,000. By this rule of thumb the audio-visual room would cost \$90,000 and provide only one space for use by the from 40 to 50 classes meeting each hour.

Investigation of the cost of equipping each classroom revealed that the installation of ceiling tracks 12 inches from the window wall and overlapping 18 inches in the center and the use of fireproof opaque plastic or glass fiber drapery would cost approximately \$200 per room. Since it would be unlikely that more than 45 of the 56 instructional spaces would need darkening, the total cost would be about \$9000.

However, the solution would make additional equipment necessary. Using a liberal ratio of one item each of the various items of audio-visual equip-

ment for five classrooms (one motion picture projector, one filmstrip and slide projector, one screen, one record player), we estimated that an audio-visual equipment budget of \$7000 was needed. The \$9000 for darkening plus the \$7000 for additional equipment totals \$16,000 for individual classroom use of audio-visual materials in 45 classrooms as contrasted with \$90,000 for use in one audio-visual room.

The analysis resulted in the decision to install ceiling tracks in all classrooms and to furnish the plastic draperies in classrooms as the need developed. The committee recognized that the need for darkening facilities is steadily diminishing as manufacturers perfect projection devices.

The analysis resulted in the decision to install ceiling tracks in all classrooms and to furnish the plastic draperies in classrooms as the need developed. The committee recognized that the need for darkening facilities is steadily diminishing as manufacturers perfect projection devices.

10. How were you able to control the length of the classroom wing?

Use of top lighting and borrowed light from the corridor allowed the committee to place the narrow dimension (28 feet) of the classroom along the corridor. This was done for two reasons: (1) By the placing of the 28 foot side along the corridor rather than the 32 foot side, the over-all length of the building was reduced by approximately 180 feet. (2) Some 15 per cent reduction in corridor square footage was effected.

11. What dictated your final decision in regard to use of flexible movable partitions?

The committee was faced with planning the school before the curriculum improvement program had reached its conclusions. This was not an inherent weakness because the building should be so planned that it can be adapted to house any program that might develop in the next 50 to 75 years. This acknowledgment dictated flexibility. In

general, the ability to rearrange rooms in terms of size and shape seems to be the most desirable kind of flexibility.

Recognizing that flexibility comes, in part, with movable cabinets, the decision to equip the building with such cabinets was readily made. It was proposed that cabinets be designed to form the partitions between classrooms as well as to provide needed storage and display space. The back of the cabinet forming the wall in the adjacent classroom could be designed to accommodate chalkboard and tackboard facilities. Rooms could then be made larger or smaller in terms of the program by shifting the cabinet walls. This idea was abandoned as too expensive and advanced for the present.

The idea of using movable cabinets to form the corridor wall was explored with the thought that the elimination of a cinder block corridor wall would reduce costs. Again, the architect, working with several manufacturers, found the cost of such cabinets opening into the classroom, together with the increased costs of framing the span from the outside classroom wall to the exterior court corridor wall, was prohibitive.

Because a cinder block classroom corridor wall seemed essential, there remained only the ends of the room to be made movable. Working with a number of manufacturers, the committee investigated the use of insulated metal partitions. In terms of cost and sound transmission, the committee felt that this kind of flexibility as programs and needs changed would merit a total expenditure of \$6000 more than cinder block walls would cost.

12. What was your thinking about the school library?

A major issue was the question of classroom libraries versus central library

facilities. Both ideas have much to recommend them. Proponents of the central library established the prohibitive cost of equipping the various classrooms with adequate library materials as opposed to the central library solution.

The committee decided on a central library and wanted it to be a real workshop in terms of instructional materials. In addition to books and periodicals, it should have facilities for individuals or small groups to preview audio-visual materials and to listen to records and transcriptions. Furthermore, there should be space for students to use typewriters for note taking purposes.

The corridor along the court side of the library has been widened to allow seating areas for several small groups so that students may overflow into the hallway. They may also overflow into the outdoor court on the other side when weather permits. Also, there is an informal lounge area in the general library. The effect of placing informal lounging furniture in existing high school libraries has been profound. More students use the library, and those students use it more frequently. Too, with the introduction of more comfortable and informal seating arrangements, library behavior has improved significantly.

13. Why did you decide on self-contained science facilities?

The subcommittee on science at first insisted on the traditional concept of science classroom and separate laboratory. As the curriculum improvement program moved ahead, the subcommittee began to accept the idea that a science facility should, in a real sense, be self-contained. Thus at a given science teaching station the class group might have 20 minutes of discussion or demonstration and the remainder of the period would be devoted to laboratory activities. This concept was accepted as the basis for planning.

One of the critical problems is the storage of equipment and supplies. This will be solved by placing between each two self-contained science facilities a combination workroom and storage room and an office.

The conviction grew that a basic science should be required of all students as well as a kind of specialized science for the college-bound youth. Accordingly, six self-contained science facilities with four work and storage rooms and offices have been provided.

The middle interior court will pro-

vide a valuable outdoor instructional facility for the natural science program. Approximately three-fourths of a hundred foot square plot is available for natural science as well as a conservatory that lies adjacent to two biology or natural science rooms.

An additional development is the incorporation of microchemistry techniques. Several science instructors were sent to various school systems and colleges using microchemistry. They came back with glowing reports on how to solve storage problems and reduce the cost of chemical supplies. Briefly, microchemistry enables students to use two or three drops of a solution in performing an experiment rather than using several cubic centimeters. A year's supply for a given student can be stored in a tote tray approximately 16 inches square and 5 inches high. Appropriate cabinets to house tote trays have been designed.

14. Are the two multipurpose rooms a present necessity or a future protection?

In its original discussions, the committee felt that it would be desirable to provide for each of the three grade levels a "commons" room where the some 200 young people in each grade level could meet for a general assembly or joint activity. As this idea was explored, the uses for the facility did not seem to merit the rather excessive cost.

However, the committee did feel that there must be space where one, two or three classes could be gathered together when the need arose. Therefore, in the two outside corners of the general classroom wing provision has been made for two multipurpose rooms. Each is essentially two classrooms separated by a folding partition.

Another reason for the inclusion of these larger spaces is our recognition that as the bulge of student enrollments moves on through the senior high schools, we may find it necessary and expedient, although perhaps not educationally desirable, to perform certain aspects of the teaching process in large groups. Should this become necessary, these larger spaces, together with the movable classroom wall partitions, will provide the needed flexibility.

15. Does mathematics require a laboratory?

Dearborn's teachers of mathematics for some time have been concerned with functionalizing mathematics instruction. One of the prime prerequi-

sites is space to store equipment, models, mockups and related paraphernalia and space in which instructor and student can prepare such materials. Accordingly, space has been provided between mathematics classrooms for storage, a workroom and an office.

16. What determined the placement of the health area?

The underlying premise of the Dearborn health program is that of instruction rather than care. However, the health area provides a waiting room, a nurse's office, and a room with two cots for emergency illnesses, which serves also as an auxiliary examination room. A small multipurpose room is separated from the waiting room by a folding partition. The basic issue in the placement of the health facility was its relationship to counselors' offices, principals' offices, and physical education facilities. Both the nurses and other school personnel finally decided that the health area should be placed near the counselors' facility and be as centrally located as possible in the total building design.

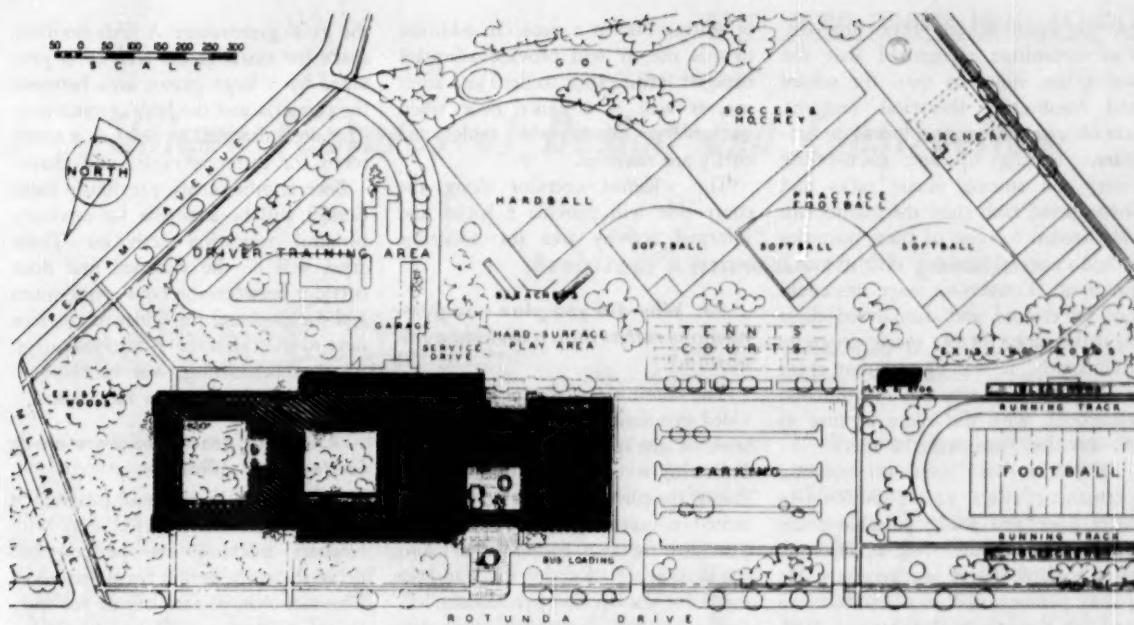
17. How are the counseling and guidance services housed?

The committee had little difficulty in agreeing on the basic guidance program for the new school. The program requires individual office-conference rooms for six counselors, a reception room, and display space for books, periodicals and bulletins.

Facilities for the counseling specialists are located around the perimeter of an inside corridor. Inside the corridor is a fairly large classroom for special large group counseling or guidance activities. The large room may be subdivided by a folding partition. In addition, this space may be used as a student council room, teachers' meeting room, or community room, or for group health activities.

18. Have provisions been made for courses in home and family living?

While not certain of the kind of curriculum that should be established for a home and family living program, the committee definitely determined that the schools could do much more in preparing students for the various problems of marriage and parenthood. A survey revealed that approximately 72 per cent of the girls are married within three years of leaving high school in Dearborn.



The committee recommended the introduction of carefully constructed units into the English and social science programs. In addition, the committee thought that an important part of training for parenthood is observation of, and work with, preschool children. Accordingly, the architect was directed to design a nursery school facility to house 20 children adjacent to the homemaking area.

19. What philosophy was used as the basis for industrial arts?

Another major issue was industrial vocational education. As the curriculum improvement program developed, it was felt that all young people should have fundamental basic educational experience, colloquially known as "common learnings," and to such a basic program would be added a specialized learnings program.

Finally, through the curriculum improvement activity, the committee came to the conclusion that a basic industrial arts educational experience was an integral part of a young man's basic education. Further, if a basic industrial arts facility was to be provided, such a facility could be used for industrial vocational education. Eventually, then, the solution was to provide an industrial arts instructional program in woodworking, metal working, electrical work, automotive work, printing and drafting.

The committee agreed that it was necessary to have an area in a given shop, such as woodworking, where

THE SITE consists of 46 wooded acres. The 30 acres in the center have been largely cleared. Complete sports facilities are provided, and a driver training area is planned for the immediate future. Parking space for approximately 470 cars and 6000 bicycles is included in the plans.

students could assemble to see a film, watch a demonstration, use the chalkboard, or carry on a discussion for a portion of the class period. The remainder of the period might well be spent in the "laboratory," with students learning certain skills or carrying forward individual assignments or projects. The essence of this solution is that a given industrial arts shop becomes a "self-contained laboratory."

A further advantage of this self-contained design is the recognition that a given shop may not be used each period in the school day. With the "class area" as an integral part of a given shop, it is possible to use that shop for a mathematics or a language classroom. Such flexibility will achieve a higher room utilization and help solve the problem of peak enrollment.

20. What were the problems to be overcome in auditorium design?

Among the 3000 replies to the questionnaire circulated to citizens on the Edsel Ford curriculum, the one point of variance between the citizens and teachers planning committees was the size of the auditorium. The questionnaire indicated that the auditorium should seat 2000 people. The question was phrased to ask for a choice of 1000, 1500 or 2000. Citizens asked

for the 2000 seat auditorium. Had the questionnaire carried the information that, in general, each seat costs approximately \$550, undoubtedly the results would have been different.

The teachers planning committee decided on an auditorium designed to seat approximately half of the student body at its peak (1800), or 900 seats. When the citizens planning committee was told the per seat cost, it readily accepted the 900 seat auditorium.

The most heated issue involved in the auditorium planning was that of "flying the scenery" as opposed to storing sets in backstage facilities. The costs were investigated as well as the merits of both solutions. Flying the scenery is much more expensive in terms of the equipment involved and of building high backstage walls, which would, in turn, destroy the architectural design. A much less costly solution was provision for adequate storage backstage. Therefore, the less costly solution was accepted. Real concern about this still exists on the part of the theatrically minded members of the planning committee.

21. What were the issues in regard to music rooms?

One issue was use of the auditorium stage as regular instructional space

for the instrumental music program. The committee recognized that the auditorium must be used for school and community theatrical ventures, school assemblies, and adult assemblies. Setting up and dismantling risers and storing music racks and instruments each time the auditorium was needed for one of these purposes would create a hardship on the music program. Conversely, stage sets could not be erected and dismantled daily to make room for the music program. Reluctantly, it was agreed that there needed to be a separate instrumental classroom, with the stage serving as an auxiliary instructional space.

The other basic issue was building permanent risers *versus* building a level floor and using portable risers in the music rooms. Arguments were that portable risers are necessary for public performances in the auditorium and for out-of-school situations. Such risers could be set up in the classroom for both the instrumental and vocal instructional program and moved to the place of public performance. If this solution were adopted and the need arose for a level floor facility, it was available. With built-in risers, the use of the room would become somewhat limited. However, the unanimous opinion of all music people was that the readiness of permanent risers so far outweighed the possible advantages of portable risers that the committee accepted the permanent riser solution.

22. Did you reach a practical solution in cafeteria planning?

The committee spent a tremendous amount of time investigating and discussing the cafeteria. The fact that teen-agers like small natural groupings inspired a searching attempt to provide small dining areas that could be opened up for a large banquet or social area. Much time was spent in considering folding doors, movable partitions, and electrically heated food carts in an attempt to carry out this idea. In the end, no practical solution seemed possible, since from 1200 to 1800 young people must be provided with lunchroom facilities.

The committee decided that small natural groupings would have to be achieved by placement of tables and chairs. It rejected the in-wall table or the long-row table as not meeting the normal and desirable social pattern of high school youth. Eventually, it decided upon a cafeteria facility capable

of seating 600 at a time. In addition to this use, it will provide adequate banquet facilities for student and adult use, as well as a dance floor when stackable or demountable tables and chairs are removed.

The widened corridor along the court side will provide a social and informal activity area for noontime activity.

23. Why did you plan two gymnasiums rather than a divided gymnasium?

The committee first approved a divided gymnasium, over the strong protests of the physical education staff. Following several hotly contested arguments, the physical education staff presented educational specifications that provided for two gymnasiums, using the same space allocation that had been made for the divided gymnasium.

Because the committee recognized the possible validity of the arguments concerning the problems of sound transmission and the competition for the gymnasium floor for varsity basketball use, the two gymnasium solution was adopted, with the boys' gymnasium providing the necessary exhibition facilities. However, this resulted in more costly physical education facilities.

24. What new areas were designed for physical education other than the gymnasiums?

The curriculum improvement program had resulted in a rather firm commitment on the part of physical education instructors that the desirable physical education program would be a combination team and individual program, with emphasis on carry-over to adult life activity. The results of the Edsel Ford questionnaire strongly supported this position. The desire to improve the physical education program in this direction dictated the necessity for holding the physical education classes to groups of from 25 to 35, rather than to groups of from 100 to 150, and the provision of several auxiliary physical education areas.

The basic physical education facility provides for one group in the boys' gymnasium, one group in the girls' gymnasium, and one group in the pool. In addition, a large auxiliary facility is provided for a fourth group in a balcony over the main corridor separating the pool and the boys' gymnasium. Access to this auxiliary balcony area is from either the boys' or

the girls' gymnasium. A fifth auxiliary space for small group activity is provided by a large games area between the cafeteria and the boys' gymnasium. This area also will be used as a store-room for cafeteria tables and chairs.

Several other areas, previously mentioned, will be available for auxiliary physical education activities. These areas will be the widened first floor corridor between the boys' gymnasium and the pool and the widened corridor next to the cafeteria. Additional areas, weather permitting, will be the outdoor physical education facilities.

25. What provisions were made for teachers' offices?

The current high school program is operating on a six-period day, with teachers teaching five periods and using the sixth period for preparation. The fact that private offices for individual teachers would not be in use for five-sixths of the school day meant that the cost of the extra square footage for such offices would hardly be warranted.

The committee recognized the desirability of assigning a classroom to a teacher for occupancy for all of the six periods in the school day. However, with the increasing enrollments and the high cost of a classroom facility, it was felt that a classroom could not become a teacher's office for one period of the day.

There was quick recognition also that it is good practice to create an environment in which teachers from different subject areas are thrown together to exchange information about their instructional program and the students involved. Accordingly, a rather adequate teachers' workroom was planned in the classroom-library unit for the English and social studies teachers' group. Adjacent to the teachers' workroom will be the teachers' lounge for use by all the teachers in the building.

For the remainder of the teachers, the general plan is to provide subject department offices, that is, a commercial office, a physical education office, a music office, and so forth. In some cases, because of the arrangement of workroom-storage rooms between classroom units, individual offices are provided.

It is through raising such questions as these and using group effort to find the answers that school plants can successfully be designed to house a modern educational program.

Unique Features of Design and Construction



Architect's answers to 11 questions

Told by WALLACE B. CLELAND

Eberle M. Smith Associates, Inc., Architects and Engineers

ON ONE occasion a good many years ago Henry Ford the elder was asked to describe the sort of education in which he believed. His reply was, "The McGuffey type." By harking back to an earlier era and to the books that were so popular then, the "McGuffey Readers," Mr. Ford was being more than sentimental. He earnestly believed in the small and personal sort of school he had known as a child, where younger children gained wisdom by listening to older ones recite and where older children learned responsibility by looking after the smaller youngsters. So great was his interest in education that he created his own school system in five reconstructed historic buildings at Greenfield Village, his museum and monument in Dearborn, Mich. In fact, among those five buildings is the log cabin, brought to Dearborn from Pennsylvania, in which William Holmes McGuffey was born. It is currently viewed by nearly two million American tourists each year.

And now, less than a mile south of Greenfield Village, on an attractively wooded 46 acre site, the city of Dearborn is building a great new high school which bears the name of Mr. Ford's son Edsel. What would Mr. Ford think of it? At first glance it would seem to be even more startlingly dissimilar to its neighboring "McGuffey school" than the sleek and colorful new 1955 cars are to the Model T. Certainly it is true that the Edsel Ford High School is a far cry from "the McGuffey type," but the teachers, administrators, parents and architects who spent more than a year of intensive research before the first preliminary drawings were made and who worked so hard to make it come true hope that Mr. Ford would approve. They even believe that some of the aspects that were virtues of the one-room school, such as the close relation-

ship of student to teacher and the sense of cooperation engendered by working with other students, will not here be entirely lost.

Upon its completion next September, the Edsel Ford Senior High School will house, ideally, 1200 students in the 10th, 11th and 12th grades. However, population forecasts already indicate that the building may soon have to accommodate 1800 students until another high school for Dearborn, now in its preliminary planning stage, is completed.

Because of the anticipated fluctuation in enrollment and more especially because each year brings new concepts of education, flexibility was considered of great importance in the design of this plant.

1. How is this needed flexibility to be achieved?

By several unique features. Nearly all the walls between classrooms are of the movable metal partition type, allowing for future adjustment of classroom size. These steel panels running to the ceiling are about 3 inches thick and are packed solid with rock wool to give a 40 decibel sound reduction factor. A special type of sound absorbing partition with perforated panels and an interior baffle is used around study and observation rooms.

Too, a great deal of study was given to the classroom cabinets, which are of 4 foot modular dimensions and are portable for interchangeability. There will be 20 variations of the four basic cabinets, and thus file drawers, magazine racks, open and closed shelving, sink counters, and full height closets for teachers are available. Nearly 700 cabinets are used throughout the school at a cost of about \$70,000. Of birch, they are prefabricated at the factory. In addition there are many other specially designed cabinets, ranging from phono-

graph cabinets to microscope cases, and from a sousaphone rack to a practice selling counter.

The metal corridor lockers are free standing so that they can be relocated.

Total cost of all cabinets, lockers, laboratory equipment, desks, seating and other furnishings is expected to run about 15 per cent of the building budget.

2. How does the heating and ventilating system provide flexibility?

The heating and ventilating system, too, has been designed for flexibility. In most of the classroom areas, the ceiling carries through continuously. It consists of perforated metal pans suspended from radiant heat pipes. Above the pipes and just below the structural steel joists is a 2 inch thick glass fiber blanket which provides for both thermal insulation and acoustical absorption. The space between the heating pipes and the glass fiber blanket is an air supply chamber, and ventilation is through the ceiling perforations. Return air is handled by crock tile ducts beneath the floors.

The metal pan ceiling, which is a snap-on type, can be easily removed to provide access for wiring or piping changes that become necessary when areas are rearranged.

3. Please explain those unusual roofs over the gymnasiums and swimming pool.

There are distinct economies in the use of *thin shell* concrete roofs to cover large unobstructed areas. This type of roof was developed in Europe. These shells are the first built in Michigan and are the largest short barrel arch spans ever constructed in the United States.

Over the boys' (and exhibition) gymnasium, a room 130 by 110 feet,

there are two shells utilizing a double bowstring truss between them. These concrete shells, which vary in thickness from 5 inches at the crown to 10 inches at the upturned edge, were each poured in a single day and were allowed to cure about two weeks before the formwork was removed.

Both gymnasiums (boys' and girls') have acoustic tile ceilings applied directly to the shell, and the swimming pool has a special moistureproof type of acoustic ceiling with glass fiber behind perforated panels.

Especially dramatic are the arching ceilings of the gymnasiums, for each of these rooms has clerestory lighting on all four sides; this gives the thin shell roofs a sense of "floating" above the rooms. The swimming pool, on the other hand, utilizes glass block top lighting in its ceiling construction.

4. Are the other structural systems conventional?

Yes, for the most part. Nearly all of the one-story portions are framed with steel bar joists. The two-story section is interesting in that the exterior columns and the joists were precast before they reached the site.

Two special areas of the school, the library-work center and the dining room, are framed in wood with wood ceilings to give them a warm, attractive, informal appearance. The spandrels between the precast columns of the two-story portion are a dark green glazed brick. Other exterior walls are buff brick and steel sash. Carrying down the walls of the interior corridors is the same brick used on the exterior, except that it has a smooth mat finish.

5. What kind of atmosphere is planned for the dining room?

The dining room is planned with tables seating from four to six students to provide a noninstitutional atmosphere. When the room is cleared of tables it will provide space for 400 dancers at school parties. The dining room, which, like the kitchen and serving room, is clerestory lighted, should be an unusually pleasant place. Its full height sliding glass walls overlook the "social court" on one side and, on the other, a sheltered porch where an outdoor type of table will be placed.

6. How are the locker rooms furnished?

Game areas of lower ceiling height are adjacent to both gymnasiums, as

are, of course, the locker rooms. The locker rooms are laid out to operate on an ingenious "basket system" to reduce the number of lockers required and to ensure sanitary clothing. The physical education department is provided with its own towel and uniform laundry.

7. How is adequate lighting to be achieved?

The amount of light desirable at task level was deemed to be 30 foot-candles, and top lighting is extensively used to maintain this illumination. The type of top light used is a low-brightness, light selecting glass block panel set in an aluminum frame.

No classroom faces the undesirable west exposure. Generally, there is a roof overhang of 3 feet or more to shield classrooms from sky glare, and the many trees on this heavily wooded site will tend to diffuse direct sunlight, as will sheer curtains on southerly exposures.

8. Won't students run up considerable mileage in getting from class to class?

At first glance, pedestrian traffic distances would appear great, but a thorough study of the plan and a knowledge of the school program will contradict this idea.

About 50 teaching stations are toward the east side of the plan, and only the five physical education teaching stations and the recreational area are in the west portion. Because of this fact and the pattern of class scheduling, there will be little long distance, between-class traffic.

To handle traffic in the more densely populated academic portions of the building, it was decided to wrap the building units around a series of courts, thus eliminating dead-end corridors and permitting traffic to move always in two directions. The resultant courts are not mere voids but are important design entities. Each of the three courts has its function.

9. What are the names and functions of the three courts?

On the right side of the plan is the social court, or student forum. Here, in a paved area relieved by planting beds, we expect to create an atmosphere conducive to social and group activity. Sheltered at the front by a series of thin shell concrete arches, which repeat the design motif of the gymnasium roofs, this court provides access to the community areas of the school—gym-

nasiums, auditorium, administrative offices. It is faced on one side by the student lounge with its pattern of brick piers providing conversation oases and on another side by the game area adjacent to the dining room planned for lunch hour recreational use.

In the middle of the plan is the project court. Around it are classes that like to take advantage of the outdoors, such as art and photography. Biology classes are there too, with a greenhouse and adjacent horticultural beds. And in the opposite corner is the nursery school with its outside play terrace. There teen-age girls enrolled in homemaking courses can observe through a one-way glass small children in supervised play and, on occasion, assist in the care of the youngsters.

The third court, at the extreme left of the plan, might be called the quiet court. Grouped around it are the academic classrooms and the library with its seven adjacent conference rooms, phonograph listening rooms, and outdoor reading terrace.

10. Can rooms be darkened for audio-visual instruction?

Yes. The top light recesses are provided with hinged wood doors that drop down to close off the light. Also both exterior sash and the borrowed light frames above the corridor cabinets are to be equipped with drapery tracks to complete room darkening.

11. Were you pleased with the site?

It's splendid. There are nearly 50 acres in all, the central 30 acres largely cleared and the rest heavily wooded. Nearly every sort of game has been provided for. Townspeople, too, can enjoy the facilities.

Total cost of site development, including lawns, fencing, bleachers, toilets and storage building will be about \$300,000. The storage building provides restrooms, pumps for the underground sprinkling system, and storage for bleachers and sports equipment. Permanent bleachers at the football field will seat 1500, and temporary bleachers will seat another thousand spectators.

Parking is provided for 450 cars and 600 bicycles. The extensive off-the-street driver training area, related on the site plan to the student automotive shop and the projected garage, reflects the characteristic community environment of this Michigan "motor city's" high school.

PUBLIC EDUCATION AND THE FUTURE OF AMERICA. *Educational Policies Commission, National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C. Pp. 104. \$1.50.*

An Interpretation of Education to Recommend to Laymen

Book Review by **KENNETH E. HOWE**

*Director of Children's School
National College of Education, Evanston, Ill.*

THIS new publication of the Educational Policies Commission sets forth clearly and concisely the unique values and practices of American education. It should find enthusiastic acceptance and wide use by teachers, administrators and all educational leaders engaged in the reappraisal of their public schools and the important rôle they must play in the future of America. It is especially appropriate for interpretation to laymen.

"Public Education and the Future of America" doesn't give a whole course in the history of education, but it does describe clearly how the ideal of the common public school was developed in the early history of our country and how from this we have continuously sought to develop an education designed to further our way of life. The founders of our democracy argued that schooling was not a luxury but a public necessity. If the people paid for the schools they had the right to control them. Control meant that the schools were accessible to the people.

LOCAL CONTROL

Thus was laid the foundation of one of the most characteristic features of the American public school system, local control by lay boards of education. It is interesting to note that in Japan, where this local control was not a characteristic of the school system before the war, the militarists had a ready-made machine for the indoctrination of children and youth. One of the measures taken during the occupation of that country to help inculcate democratic practices and values in the schools was the establishment of local boards of education. Whether this development will remain to become permanent we have yet to see. In our way of life this is an important feature of our school organization.

In developing a professional zeal and conviction for the profession of teaching, administrators and school staffs could well use this book as the basis for group discussions on the development of the respective rôles of elementary, secondary and higher education in the growth of our country. The steady rise in population was met by increased school facilities and ex-

panded functions. Our schools moved through a period of being mostly private, with very specific functions, toward the comprehensive high school embracing many different goals.

The Educational Policies Commission has described here how citizens and educators have provided a general education that utilizes the best of the older "intellectualized" approach and the best of the newer "practical" approach in an effort to give American youth the knowledges and skills demanded by a modern industrial democracy. Educational planners have also sought a variety of specialized programs to care for the diverse needs, capabilities and interests of a heterogeneous high school population.

The book also describes the development of higher education in America, with special reference to the importance of teacher education. This story of the continuous effort to raise the standards in teaching is an important one for our times. Both professional and lay groups should realize fully the need for teachers in our public schools today and the trends that will operate in the immediate future. One of the great struggles that our institutions of higher education have weathered in the past decade concerns the protection of one of our most fundamental freedoms: freedom of inquiry. By protecting this freedom scientists have advanced our technological progress

and have made new discoveries in human growth and development and in the psychology of learning. All this has helped improve the American way of life.

Professional workers, teachers and administrators may well use this publication to extend their visions and deepen their convictions concerning the important rôle that education plays in the development of America. Lay citizens can use this book to strengthen their confidence in the public schools of America and in the leadership that has so skillfully guided their development.

FAITH IN EDUCATION

A quotation from the last chapter points up well the important theme of this new book.

"Faith in public education rests ultimately on two beliefs; that a particular kind of education must be designed to support a particular way of life and that public education will best support the American way of life. The Founding Fathers were convinced that a society dedicated to freedom, equality and self-government demanded special educational commitments and institutions. Those who built America's public schools believed public education to be a special instrument for the maintenance of a democratic society through the cultivation of worthy and responsible persons."

The drive for better schools has meant better prepared teachers. Teacher preparation has changed greatly since this first normal school opened in 1846.



From *Cable's Public Education in the United States*, Houghton Mifflin Company



At summer school in Oceanside, N.Y., a fourth grader captured interest of junior high pupils with his collection of moths and butterflies.

Summer "Helping Classes" Pay Scholastic Dividends

THOMAS J. KILROY

*Principal, South Oceanside Road School No. 4
and Summer Program, Oceanside, N.Y.*

THE Oceanside Summer School of Oceanside, Long Island, N.Y., began in 1949 with one teacher being available to help any child interested in review of work not fully mastered during the regular school year. It has evolved from this small scale into a major program utilizing the services of a principal and a staff of 28 teachers. Although the scope of the program has increased to match the numbers attending, nevertheless much of the informal, friendly student-teacher relationship has remained.

The "helping classes" offered during the last summer—as differentiated from the regularly credited summer schools found in many communities—served the interests and needs of 446 children on the three levels of learning. On the elementary level two classes were formed for each grade; on the junior high level classes for seventh and eighth grade students were

offered in mathematics, science, English and social studies; on the senior high level courses were provided in English, speech and remedial reading.

In the main, the work was of remedial nature, designed primarily to help those students who somewhere along the line "missed the boat" in mastering certain areas of study. In order that the program would serve its true purpose, a careful analysis was made of the individual needs of the children. These scholastic difficulties were the determining factors in shaping the subject matter to be covered. After this groundwork was completed, each teacher submitted an outline of work that was expected to be covered during the six weeks of summer school. However, this long-range planning was subject to revision in the light of the strengths and weaknesses manifested by the children from day to day; that is, some phases of the

curriculum were assimilated more readily than was expected, and in other situations the reverse was true. Pupil needs necessitated a flexible program on all three levels.

The size of the classes was relatively small, usually from 12 to 18 pupils. This aspect made it possible to probe for individual difficulties and to give individual help as needed. One approach to dealing with problems that were common to several individuals within a class was homogeneous grouping. In some situations an entire class needed help in some phases of remedial work. Thus, in the organizational setup provision was made to meet the needs and interests of individuals, groups and, at times, entire classes.

Although the main objective of the summer school was to strengthen the scholastic background of children who revealed definite deficiencies, at the same time a sincere attempt was made by the staff members to create an informal, friendly atmosphere. If the climate of the classroom results in a happy experience for the children, it is reasonably certain that a better grade of work will be achieved.

To this end an endeavor was made to have the lessons carefully prepared, interestingly motivated, and then presented in a challenging manner. In particular, provision was made to allow as much pupil participation as possible. In the different classrooms the children were fascinated by the "bag of tricks" used by the instructors. Various kinds of manipulative materials and stimulating devices were used to make the learning not only purposeful but also lasting.

NOT WITHIN FOUR WALLS

It might be added that not all of the learning took place within the four walls of the classroom; e.g. on the junior high level, the science teacher, in reviewing a unit pertaining to entomology, often took his class outdoors to study nature at first hand; insect nets, made by the children, could be seen waving in the air above the few vacant lots left in Oceanside. A 9 year old boy who is intensely interested in this branch of science was asked to bring in his extensive collection of moths and butterflies to show a class; the child did so with great eagerness and delivered several lectures on the life history of the commoner insects. Imagine the wonderful feeling this boy had as a result of this experience!

His contribution was received most favorably by the class. Other teachers, too, used the resources in the community.

The children came with all kinds of scholastic ills. Some needed help in mastering the simple mechanics of reading; some needed help in mathematics, particularly in the fundamentals and problem solving; others came for help in English grammar or to improve their skills in spelling, letter writing, and composition work. At any rate, whatever the problems might be, they were brought out into the open, analyzed and discussed—sometimes three or four times—until the processes were mastered. Many times it was necessary to do this on an individual basis.

The efforts put forth began to pay scholastic dividends. Slowly but surely many of the so-called problem children began to catch on and assimilate materials which, in the past, seemed far beyond their capacity. When achievement was shown, no matter how trivial, recognition was given by the teachers. Encouragement and praise, given every now and then, spurred the pupils on to strive for even greater accomplishment. The old familiar phrase used by the understanding teacher, "I know that you can do it," could be heard in many of the classrooms. It was noticeable that many of the boys and girls, perhaps for the first time in their lives, began to have faith in themselves and to do things on their own.

NO COERCION

Attendance was surprisingly good. Yet there was no coercion of any kind; the children came to summer school because they wanted to come; there was a purpose for coming, and they had fun in the learning situations. Even the seashore, on those hot summer days, did not lure them away from their summer school work. The parents, too, were most cooperative; many deferred their vacations so that their children could avail themselves of the remedial program.

Significant gains were made by the children as a result of the "extra lift" given in summer school. Many of the pupils were brought up to grade level, whereas others nearly approached that goal. Nearly every child who took part in the summer program returned to school in the fall with a new faith and confidence in his ability to be an active participant in class work.

Michigan Supreme Court upholds

State Equalized Values

LEE O. GARBER

Associate Professor of Education
University of Pennsylvania

AT THIS time, when school districts are finding it increasingly difficult to obtain adequate funds to operate their schools, the supreme court of Michigan has rendered a decision that offers local districts a real opportunity to improve their finances.*

This decision has the effect of making it possible for some 4000 districts in that state to increase their tax collections by an aggregate of several millions of dollars. It holds that state equalized values must be used as the basis for computing school taxes rather than local or county equalized values, which are, in virtually all, if not all, cases, lower than the state equalized values. (It is reported that in a number of counties the county valuations are but slightly in excess of 50 per cent of the state valuations and that in a few they are even less than that amount.)

While this decision will generally be considered as of primary importance because of its effect on increasing the amount of tax money available for education, it also is important because of its holding that a local board of supervisors has no authority to overrule a county tax allocation board in its decision relating to the percentage of locally collected taxes that shall go to schools and the percentage that shall go to the county—a practice that has, apparently, been more or less prevalent in certain areas. Thus, it has the effect of freeing school districts from control over their taxing powers by county boards of supervisors.

* School District No. 9, Pittsfield Township, Washtenaw County v. Board of Supervisors of Washtenaw County et al., 67 N.W. (2d) 165 (Mich.).

Before the facts of this case are considered, it might be well to take a look at the Michigan tax situation. In 1932 a constitutional amendment was adopted limiting the tax on property to 15 mills on the assessed valuation, except by special vote taken for particular purposes. Following the adoption of the amendment, the legislature voted to establish county tax allocation boards for the purpose of apportioning the 15 mills among the local taxing units, including school districts and counties. It appears that, in practice, it was not uncommon for county boards of supervisors to maintain control over school expenditures by equalizing county valuations at a point considerably lower than state valuations and then insisting that taxes be levied on the county figures.

In this case, it appears that on May 11, 1954, the plaintiff school district, lying wholly in Washtenaw County and including the city of East Ann Arbor and part of Pittsfield Township, filed with the tax allocation board of Washtenaw County its estimated budget for the fiscal year in question, in the amount of \$80,000, exclusive of amounts required to be raised as extra voted millage and for debt retirement. The finance committee of the defendant, board of supervisors of Washtenaw County, also filed its budget, in the amount of \$1,450,615, with the tax allocation board. On May 28, 1954, the tax allocation board adopted resolutions approving, for county purposes, a maximum tax rate of "5 mills on the 1954 county equalized valuation which amount does not exceed 4.33 mills on the 1953 state equalized valuation of the county."

On June 7, 1954, by another resolution, it stated that "the final tax rate for school purposes on property in this county should not exceed 12.32 on the 1954 county equalized valuation of such property, which amount is equivalent to the rate of 10.68 mills on the 1953 state equalized valuation of such property apportioned according to the 1954 county equalization."

Later, July 27, 1954, the plaintiff certified the amounts to be raised within the district for school purposes for the fiscal year 1954-55, based upon the action of the allocation board and upon the state equalized values for 1954. The board of supervisors, apparently, disagreed with the allocation board's decision—4.33 mills to the county, 10.67 mills to the school district, based upon state equalized valuations. Consequently, on Oct. 19, 1954, it decided to compel the districts to use the county valuations, which were only about 82 per cent of the state valuations, and, because enough funds to operate the county could not be raised if the 4.33 mills were based upon county valuations, it decided to increase the county's proportion to 5 mills and to decrease the schools' proportion to 10 mills—both millages to be applied against county rather than state valuations. It did, however, permit intercounty school districts to apply the 10 mills allotment against state equalized values. The tax certificates, as served by the plaintiff, indicated a total of \$101,211.01 as the sum to be raised by taxation within the district. (This sum would have been reduced to \$89,507.16 if the action of the supervisors had been declared legal.) When the township clerk and the city clerk refused to act in accordance with the plaintiff district's certificates but followed the direction of the board of supervisors, this action was brought by the plaintiff for the purpose of determining the issues involved.

QUESTION OF AUTHORITY

First, the court turned its attention to the question of the authority of the board of supervisors to disregard the action of the tax allocation board. In arriving at its decision on this matter, the court pointed out that the tax allocation board is directed by law "to divide [sic] the balance of the net limitation tax rate between all local units after due consideration of the needs of the several local units." It added: "Any local unit considering

itself aggrieved by the action of the allocation board may appeal to the state tax commission."

It reasoned that, within the meaning of the statute, the county is a local unit "and that specific authority to supersede or alter the action of said board is not granted to the board of supervisors." Further, it ruled that the sole method of reviewing the action of the tax allocation board is by appeal to the state tax commission. To the defendant's contention that the action of the tax allocation board was not properly exercised and was not taken as required by statute, the court replied that under no circumstances could the action of the board of supervisors be considered authorized because the board was without authority to "exercise a power not vested in it by statute." Finally, it concluded that the tax allocation board had acted in a lawful manner, that the sole method of review was by an appeal to the state tax commission, and that the "board of supervisors was without jurisdiction to make a new division of the millage."

COUNTY OR STATE EQUALIZATIONS

In the second place, the court was asked to rule on the question of whether the tax rates allocated by the county tax allocation board should be applied on the basis of the county or state equalized valuations. Necessary to a determination of this question, the court stated, was a determination of the meaning of the term "assessed valuation" as used in the constitution. One section of that instrument directed the legislature to provide "a uniform rule of taxation"; another section gave to the legislature the authority to provide for the assessment of property, with certain exceptions, "at its true cash value."

On the basis of these, the court reasoned that "this state is committed to the basic principles of uniformity and of the assessment of property at its true cash value, in matters pertaining to the taxation of property under the general tax law." It also pointed out that, under constitutional authority, the legislature created a state board of equalization and gave it authority to equalize assessments of all property, with certain exceptions. Defendants contended the purpose of this board was to furnish a basis for the apportionment of general state property taxes. The court took the position that this was not the sole purpose but

was only one of the purposes—that it "was intended to carry out the provisions relating to uniformity of taxation and to assessment at true cash value by providing a method through and by which such result may be accomplished."

Plaintiff contended that the final step in determining true cash values is the action of the state equalization board and, consequently, its action is final and conclusive. The court accepted this and cited precedent in its support. It also referred to an Oregon case (*Parker v. Clatsop County*, 138 Pac. 239, 69 Ore. 62) in which the court defined the term "assessed valuation of the county" as meaning state equalized value. In holding that the tax must be levied on state equalized valuations, it said: "Obviously property may not, for purposes of taxation, have two or more 'true cash values.' Under our present system the final authority for determining such value is the state board of equalization."

Finally, with reference to the action of the board of supervisors in directing that the state equalized valuations be used in intercounty districts but requiring the county equalized valuations to be used in the case of districts located wholly within the county, it stated that "a disparity, or inconsistency, at once arises," and added: "In other words, we would have true cash value as fixed by the state board of equalization applicable in intercounty districts and the materially lesser county equalized valuation used elsewhere. We do not think that such a situation is contemplated by pertinent constitutional or statutory provisions."

IMPORTANT IMPLICATIONS

As was stated earlier, this case has two important implications. It makes school boards in Michigan fiscally independent of county boards of supervisors, and it results, on the whole, in providing for a substantially increased base for the levying of school taxes. This, of necessity, can result in increased tax receipts. It remains to be seen, however, whether local boards will take advantage of the opportunity they now have of obtaining badly needed increases in school revenue or whether they will, as the result of local pressure, lower the tax rate, so that when it is applied to the increased base it will result in tax collections about the same as those that existed before this decision was rendered.

Professional Program for the Substitute Teacher

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WE NEED to look at the day-by-day substitute teacher through more understanding eyes. Most substitute teachers are professionally educated former teachers, yet when they serve as substitute teachers, some school systems appear to forget this!

I have just completed a study of the substitute teacher in New England in which approximately two thousand superintendents, elementary school principals, regular teachers, and substitute teachers participated. An attempt was made to find out what public school systems in towns of more than 9000 but less than 50,000 population are doing to help integrate the work of the substitute teacher with that of the regular teacher in the elementary schools.

The four areas of substitute teacher recruitment, orientation and assignment and the evaluation of service are basic to a planned program for administering this necessary service. Let us consider these areas.

RECRUITING SUBSTITUTES

It was found that the superintendents in New England use a variety of ways to recruit substitute teacher candidates. The communities with populations of less than 30,000 interest prospective substitutes through (1) casual conversation—mentioning their need to townspeople and former teachers in an incidental way, (2) receiving personal applications—interested persons write in to apply, and (3) asking regular teachers to suggest the names of their friends. Large school systems in cities with populations of more than 30,000 but less than 50,000 obtain their substitutes through (1)

asking unsuccessful applicants for regular, full-time teaching positions to substitute, (2) casual conversation, and (3) personal application. The incidental and informal methods used to recruit substitute teachers are perhaps responsible for the fact that substitute teachers do not feel themselves to be necessary members of an educational team. This probably is not limited to New England.

There is an opportunity here for school administrators to instigate a vigorous recruitment program in their own communities. The use of newspapers, radio announcements, and letters to former teachers inviting them to serve can do much to increase our supply while helping to point out the need for substitute teacher assistance. Many potential substitute teachers need only an invitation, since the status of substitute teachers, historically, has not been one that would be conducive to making former teachers want to apply. Here are untapped resources.

Substitute teacher applicants should fill out the *regular* application form. Recommendations should be solicited to provide information as to the seeming fitness of the person concerned for working with children and performing the services of a substitute teacher. The substitute teacher should be interviewed by the superintendent, building principals, and available regular teachers. This screening process could be used to ascertain those who need more help in order to substitute effectively, as well as to provide the base upon which an inservice education program can be built.

It is recommended that in smaller communities where the potential sub-

stitute teacher supply is not adequate a regional or district plan for recruitment be followed. Neighboring communities could band together to coordinate their recruitment of substitute teachers so that the supply could be utilized by one or more communities. More than half of the 75 New England communities reported that their substitutes served more than their own community. This can prove to be a helpful practice where transportation and distance do not present obstacles that cannot be readily overcome. This suggestion, if followed, could greatly assist in the equalization of the *supply potential* of the substitute teachers. The details need to be worked out by local school authorities in cooperation.

Substitute teacher recruitment needs to be a professional job, one that indicates to the potential substitute that he is considered necessary for an important professional service in the schools.

ORIENTING SUBSTITUTES

As poor and haphazard as our practices of recruiting substitute teachers may be, substitute services are obtained, even though not at present in sufficiently large numbers. Our great concern should be the proper orientation or the helping of substitutes to learn what the job requires. Regular teachers should know this, too.

It is human nature to take more interest in an undertaking when one feels he is needed. Yet my study indicated that the substitute teacher is left to introduce himself to the staff members with whom he will be working in more than half of the com-

munities responding. School superintendents have indicated that about one-third of the school systems do not make any information about the system available to substitute teachers. This pattern is consistent, since other reports indicate that substitutes become familiar with the school plants by visiting the schools informally or taking a hasty tour the morning of their first call to serve.

School principals in the cooperating New England elementary schools said that the holding of special meetings to discuss mutual responsibilities of both regular and substitute teachers was important, especially important if they were to try to integrate the work of the substitute teacher with that of the regular teacher. However, the elementary principals reported that *no one* assumed the responsibility for planning and calling a meeting. Neither did anyone in a little less than half the responding school systems assume any responsibility for issuing a bulletin of suggestions for substitute teachers, even though this was reported as being of great importance.

THREE-PHASE INSERVICE PROGRAM

School systems must do all they possibly can to ensure the proper orientation of the substitute teacher in their school system. Many substitute teachers need to know much more than they now know about the system in which they intend to serve, especially about the over-all program.

It would be a good practice to call a meeting of the substitute teachers to discuss with them their feelings about the need for help and, specifically, what kind of help. Once the need to orient them is recognized and established, a steering committee of administrators, teachers from several elementary schools, and substitute teachers should be formed. A real attempt should be made to discover competencies among the group, so that demonstrated leadership can be utilized. The committee would then be charged with the over-all planning of a program that would help substitute teachers become oriented to their job. The program will be a local school system matter based entirely upon local needs.

Only one planned program for the inservice education of substitute teachers was reported among the cooperating communities in New England. That community is North Haven, Conn. I was the coordinator of a three-

day, 15 hour program for substitute teachers in North Haven a few years ago.

I suggest that a program of inservice training for substitute teachers include three phases: (1) getting acquainted, (2) learning about the educational program, and (3) professionalizing the substitute service. I should include in this program several points.

GETTING ACQUAINTED

Social Meeting. A social meeting could be called by the superintendent of schools or the local teachers association. The only purpose should be to introduce the substitute teachers as professional co-workers to the regular teachers. The regular teachers should be urged to seek out the substitutes to make them feel welcome and part of the professional team.

Business Meeting. This meeting could follow or be combined with the social meeting. It could be addressed by a member of the staff or a resource person on the subject of the responsibilities substitutes and regular teachers have to each other. A panel could discuss this idea, too. Questions could be answered in the meeting or could be written down to be answered via a bulletin or at another meeting.

Small Group Meetings. Small groups of substitutes could meet with various building faculty members, especially in buildings in which they may substitute. Substitute teachers could be invited to eat lunch with the regular teachers.

LEARNING ABOUT PROGRAM

Informative Talks. The over-all pattern of the community's educational program could be explained by the superintendent or a member of the board of education. Included in this should be a discussion of the prevailing educational philosophy.

Informative Materials. A school system handbook and any school bulletins related to the schools, individually, should be made available to all substitute teachers. Gradual release of this information should be practiced, so that the substitute has a chance to peruse it in a leisurely fashion. It may be best to release the school information during a visit to the school concerned. Curriculum outlines or other guides to teaching and learning materials should be made available. Substitutes should be encouraged to subscribe to at least one professional educational magazine of their choice.

If the school system has a professional library, materials could be borrowed by the substitute.

Informative Trips. Personal cars or a school bus should be used for trips to help the substitutes who need to learn about the community, the layout of the school districts, and the location of the system's elementary school plants. Information in regard to how to reach the buildings could be obtained, duplicated and given to the substitute. The group on tour could stop to visit the elementary school buildings. Some may prefer to take individual tours to see the physical plant and available facilities.

Informative Observations. Substitutes should be encouraged to visit classrooms representative of the elementary school age child so they can observe the various stages of a child's development. Opportunity should be allowed for them to talk over their observations with the principal or teachers. Pre-observation planning can ensure a meaningful period of observation. Attention should be upon growth and classroom adjustments of children. Substitute teachers should make properly motivated classroom observational visits to watch the regular teachers in action.

Informative Participation. Some school systems could make available time when substitute teachers could work with small groups along with a regular teacher and under her guidance. This could be offered on a voluntary basis, or some systems could include this as a requirement for pre-substitute training. Emphasis would be upon actual teaching experience, pupil control, classroom climate, and the duties assumed by regular teachers.

PROFESSIONALIZING SUBSTITUTES

Requirements of Job. The requirements are the same for those who desire to do substitute teaching as they are for the regular teacher. Attempts should be made to ensure some uniformity of demands on substitutes in the neighboring communities. A professional job should be required of all who substitute. Invitations to faculty meetings should be extended to substitute teachers.

Teachers Associations. Efforts should be made to include the part-time substitute teacher as a member of local teachers' associations. Consideration should be given to a reduced membership fee, providing enjoyment of all rights and privileges, for substitute

teachers. Conference attendance should be encouraged, as should attendance at inservice or extension programs.

Administrative Bulletins. Copies of administrative bulletins which would be important for substitute teachers to have should be mailed to them. The practice of sending a newsletter or a bi-monthly bulletin especially written for substitute teachers is an excellent one. Substitute teachers could be encouraged to write articles or suggest materials for inclusion. School systems should be sure that those bulletins prepared by supervisors are sent to the substitutes or are otherwise made available.

Regular Employment. Substitute teachers who give satisfactory service should be invited to become regular elementary school teachers when vacancies occur. Valuable experiences and proper orienting as substitute teachers should serve as valuable training for regular teachers, especially if the substitutes are available and desire full-time employment. Substituting should not become a prerequisite for regular teaching positions, however.

A systemwide program such as has been suggested will fulfill the requirements of the orientation of the substitute teacher. The necessary involvement of the principals and teachers will assist these groups also to become oriented as to the job of the substitute teacher. It is necessary that specific attention be directed toward defining job responsibilities of the principals and regular teachers to the substitute teacher. It must be a program built upon recognized needs, a program that provides real as well as vicarious experience, along with discussion and action.

This plan suggests a total approach, an approach that calls for a different perspective for viewing substitute teacher services. It calls for careful analysis of a system's own problems in supplying sufficient numbers of day-to-day substitute teachers. Once needs are ascertained, a program is needed for orienting the substitutes to the job to be done. School systemwide plans are important, but faculty members have a responsibility, too.

The second part of this discussion will appear next month. The rôle of the building faculty in the job of orientation, as well as the importance of the assignment and the evaluation of substitute teacher services, will be covered in this concluding section.

Important task of supervision is

Helping First-Year Teachers

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WHAT supervisors' functions are most important to superintendents? A committee of the Tidewater Association of Supervisors in Virginia recently made an investigation to find out. In this day of rapidly expanding school facilities, helping new teachers turned out to be the No. 1 factor.

The study was carried out in cooperation with the Virginia superintendents conference. A total of 77 usable replies was received from the 111 superintendents in attendance at the conference.

Although the study dealt with a wide range of supervisory activities, only four areas were chosen as a basis for this summary. These are (1) the relative importance of various supervisory functions, (2) duties of supervisors, (3) salary and (4) average number of teachers per supervisor.

On the list called "Personal Qualities Needed by Supervisors," the superintendents gave top ranking to intellectual maturity and emotional stability. They also emphasized how important it is for supervisors to show unusual dependability and skill in planning and organizing group meetings for teachers.

Sixty-two, or 81 per cent, of the respondents listed the assistance of new teachers as the most important supervisory function. Other items checked by approximately one-half of the superintendents were these activities: working on curriculum revision, planning inservice activities, assisting the principals to evaluate teaching technics, and helping the local school administrators to improve the quality of the professional faculty meetings.

The functions which the superintendents considered not important (and, indeed, which might be termed contrary to new concepts of supervision) were (1) rating teachers, (2) disciplining the teachers, (3) establishing a uniform pupil reporting sys-

tem for a division, and (4) checking the time the teachers arrive at school.

Participation by supervisors in local, state and national organizations is fine, as far as the superintendents are concerned. There's much to be gained too, they said, in meeting with other supervisors to study common problems. They also felt that supervisors should be consulted when positions of leadership in the system are being filled and should help to select teachers for employment.

On three questions in one section of the questionnaire—the one dealing with the duties of the supervisor—Virginia superintendents couldn't agree. They were evenly divided on the questions of whether supervisors should (1) use office time to read professional bulletins, (2) receive full pay while enrolled in summer school for advanced graduate study, and (3) maintain regular office hours on Saturday morning.

WORTH-WHILE CONTRIBUTION

What about salary? "As much as or more than that of the principals," said 73 per cent of the superintendents. This suggests that the superintendents of Virginia believe that supervisors are making a worth-while contribution toward the improvement of instruction.

The number of supervisors employed in each school system depends, of course, upon the size of the system, but, generally speaking, the larger the school system, the larger the number of teachers per supervisor. In this study, 64 was the average number of teachers for each supervisor.

From the point of view of the association itself, this study is only a beginning step in the attack upon the problem of inservice growth of supervisors. Many important implications were discovered, and the most significant will be used as a basis for future programs of the group.

It pays to

NEGOTIATE FOR SCHOOL SITES

**Patient and skillful dickering will
save time and the taxpayers' money**

AROL BURNS

Director of Real Estate, Los Angeles City Schools

As Told to VERNON D. MacPHERSON

IN OLDEN times a king could seize a homeowner's property, for use by the state or by himself, at his own pleasure. There is a difference today—just compensation must be paid for all property taken.

And this is as it should be.

But the problems involved, the eventual cost, and the delay which results when land is acquired through eminent domain (court condemnation) procedure have proved conclusively that it is better to negotiate for the acquisition of school sites.

By careful, patient and skillful negotiation, a school real estate agent almost invariably will save his employer—the taxpayers—money.

Often as important as cash, valuable good will may be created by the school board representative who deals properly and fairly with a property owner.

It has been my experience as a school land agent in Los Angeles that court juries often overcharge public bodies that condemn land. One reason is the tendency of some persons on the jury to let their emotions interfere with their judgment—to regard the school system as "big and rich" and the property owner as a "poor" individual whose land or home is being taken against his will.

Another reason is that attorneys representing defendants in condemnation actions are careful to eliminate from the jury persons with any real estate knowledge.

Therefore we make every attempt to purchase property outright, instituting condemnation actions only as a last resort—in about 5 per cent of the total land transactions. Eventually we settle most of these cases also, actually going to trial in fewer than 1 per cent of the actions.

The board of education has a policy of paying a fair and reasonable price to the property owner but at the same time protecting the taxpayers by not knowingly being gouged.

FIND SITE

When we are authorized to buy land for school properties we try to find a suitable site as near as possible to the geographical center of the district to be served by the new school.

Our agents then survey the area with a view to finding all parcels of land that offer school site possibilities, together with relevant data such as size, shape, topography, drainage, soil, accessibility, proximity to transportation, sewer and drain facilities, utilities, street improvements, and proposed public improvements that might affect the site in the future.

A "horseback appraisal" (a term used by appraisers meaning a rough estimate) is made of each possible site in order to obtain a relative idea as to the value of various sites under consideration.

After studying all the relevant factors, the real estate agent makes a report with recommendations, and the

board decides on one site, authorizing him to proceed with the acquisition.

The first and most important step in land acquisition is a proper and complete appraisal. The 1929 depression revealed that many failures of lending institutions could be traced to unwarranted valuations that were the basis for loan commitments.

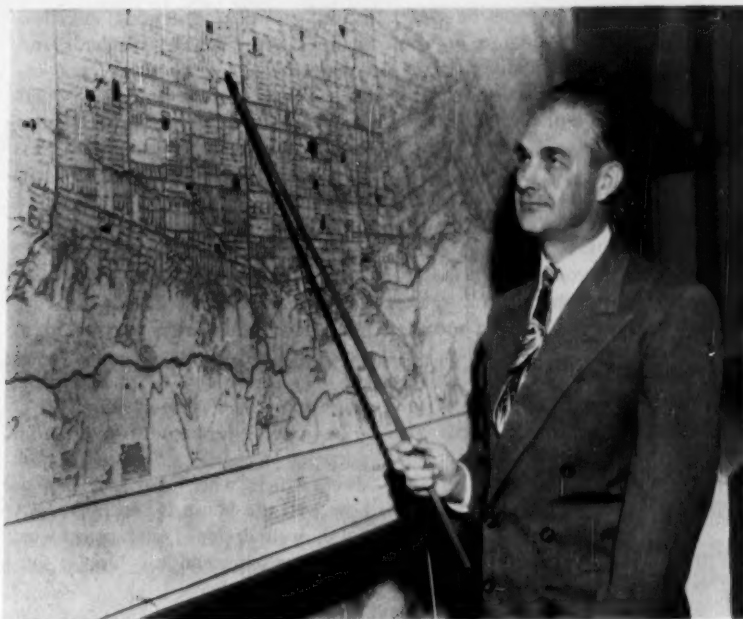
A battle cannot be won without ammunition, but virtually all land owners ultimately will succumb to a reasonable price when faced with a fair and impartial appraisal based on true and provable facts and figures.

A good example of this was the purchase by the Los Angeles board of a new site adjacent to some of the most valuable land in our city. The board had this property under consideration for a number of years. But the best price obtainable had been \$30,000 per acre, or \$130,500 for 4.35 acres.

We spent almost two months investigating and preparing an appraisal. It showed a value of \$16,000 per acre, or \$71,775 for the site. Then we began negotiations, handing the owner the entire appraisal in booklet form, inviting him to study it for a week or 10 days and pick out any flaws in it.

Result: We purchased the property for \$72,645, or \$57,855 less than the previous obtainable price. It can be seen readily that the expense of the two months spent in properly prepar-

Arol Burns makes use of a large map to designate plant sites in the Los Angeles school district.



ing for this deal was infinitesimal compared to the great saving.

A land appraisal is an analysis or estimate of the value of a given piece of property. No two properties are exactly alike, and an appraisal should take into consideration, among other things, the following:

1. Principal use of the district, such as residence, apartment house, rooming house, or industrial building.

2. Stability of the district—whether it is the best, good or poor; whether the trend is static, up or down; whether there is a transition to business, apartments or industry.

3. Age of the section—whether it is old, new, congested or scattered; the residents, their social background and income level; effectiveness of the purchasing power in the district; wise or unwise zoning or deed restrictions; over improvements or under improvements.

It takes many man-hours to assemble these facts. But an appraisal is largely gathering facts and basing judgment on them.

Appraisers use three well defined methods of valuation approach, outlined as follows:

1. **Reproduction Approach**, meaning an analysis of the cost to reproduce an improvement, less depreciation under present costs of labor and materials.

This method does not always reveal the true market value. For

example, a piece of property may be reproduced for \$5000, but similar properties might be selling for \$7500, and at the time of appraisal it might be earning on the basis of \$7500. On the other hand, the building might be an under improvement, or misplaced, and worth only \$4000.

The theory of the reproduction approach is that the land is worth so much and the building is worth so much, the total being the value of the property. The land value is determined by the price for which similar land can be purchased.

Building values can be determined either by figuring actual cost from plans and specifications or by the square foot and cubic foot method used by most appraisers, which is based on knowledge of what similar buildings cost to construct.

2. **Comparative Approach**, comparing certain property with other similar properties. To get supporting data for use of this method, the real estate section obtains maps showing the property proposed to be purchased and the surrounding territory for a distance of from half a mile to a mile. The land sought is shown in yellow, all sales in red, listings in blue, and leases, rentals and estates in green.

Facts and history of each transaction are recorded on a separate list. Details of each are verified through contact with at least one of the principals. It is imperative that the in-

formation be accurate, not only for use of the appraiser but because it might be necessary to use the information in court in case negotiations are not successful.

These maps and information become a part of the permanent file and are available for inspection by grand jurors, board members, administrators, auditors or other officials and investigators.

In addition to obtaining these data, our land buyers contact numerous real estate brokers, bankers, and building and loan officials in the district. Often many property owners also are questioned—all to gain information that may help in arriving at a conclusion for the appraisal.

3. **Capitalization Approach**, an analysis of the present worth of future income from income producing properties.

In the straight capitalization approach, estimated costs for operating, repairs, depreciation, replacements, taxes and insurance are deducted from the gross operating income. The remaining — net income — is then capitalized (divided by the interest rate, which is determined by the rate necessary to attract capital).

Land Residual Approach. In this method the reproduction cost of the building, less depreciation, is considered the present value of the building. From the gross operating income the

annual depreciation of the building is deducted, plus the interest on the capital invested in the building. The remainder is the net income earned by the land. It is capitalized to reveal the land value.

Building Residual Approach. This is the reverse of the land residual method. A definite land value is set up. From the gross income is deducted a fair rate on the land value, and the remainder is the net income of the building. This is treated as an annuity for a given period. The estimated remaining useful life of the building and its present worth are added to the arbitrary land value. The sum is the capitalized value of the property.

Property Residual Approach. This method assumes that the building and land are a unit and that the earnings of neither can be segregated. At the end of the economic life of the building, there remains the land value reversion.

In making acreage appraisals we determine what the highest and best use of the land might be. For illustration, we'll assume a given plot is best suited for residence subdivision. A hypothetical subdivision is projected on paper to conform to the plot, street patterns, and surroundings.

The anticipated sale price for each lot is set up, and the total anticipated gross sales from the subdivision thus are calculated.

From the total sales are deducted the estimated improvement costs and sales costs, including street pavement, sidewalks, curbs, sewers, sewer lot connections, storm drains, water mains and connections, fire hydrants, gas

mains, gas lot connections, electrical facilities, street lighting standards, and supervision and engineering; also office expense, sales commissions, advertising, subdivision trusts' acceptance charges, sales contracts, collection fees, policies of title insurance, subdivision trusts' closing fees, and estimated taxes over the anticipated time to sell out the subdivision.

By deducting all of these items from the anticipated gross sales, we have a figure that a subdivider can afford to pay for the raw acreage, a figure we can thus say is a fair and reasonable price for a new school site.

In judging a house for appraisal purposes we use a detailed check sheet, which, when analyzed, tells us how well the house is constructed. A house well designed and constructed always will demand the highest current market price.

School districts seldom face the problem of severance damages, damage to a piece of property by virtue of another portion of the property being taken. Severance damage is figured on the basis of what the remaining property is worth after the taking. Problems in severance appraisal are countless, and each is different.

When the appraisal is complete, the board is ready to negotiate with the property owner. In Los Angeles, board policy provides for dealing directly with the owner unless he requests in writing that we negotiate with a real estate agent or attorney.

Reasons for direct dealing are:

1. Valuable good will may be created by proper and fair negotiations directly with the owner.

2. One shady or dishonest deal can blacken a board record for many

years. It is common practice and perfectly ethical for a broker to obtain a net price for the owner of a piece of property and to collect for himself any amount he can get above that price. The possibilities of graft in deals of this nature with public agencies are obvious.

3. The saving to taxpayers of a broker's commission on a single land purchase may pay the annual salary of the board's land agent, who in addition handles hundreds of other land matters throughout the year.

4. Experience of the school agent in buying land has made him familiar with board problems, rules and regulations, and thus he is qualified to look out for the taxpayers' best interests. Purchasing school property through a private broker would still mean employment of a man to handle the deals in accordance with board rules and to gather and keep records for investigation of the grand jury and the auditor.

5. If schools made a practice of dealing through brokers, board of education members and employees constantly would be under pressure from brokers to buy property without regard to actual school needs.

TICKLISH TASK

A public agency seeking land always faces a potentially explosive community situation because property is the most precious thing a person possesses. It is a personal thing, and getting him to part with it often is a ticklish task.

Thus, to accomplish his mission the school real estate agent must practice high class salesmanship. He must convince an owner that there is greater public need for the property than he has for it himself—that it is necessary for the community to acquire the property. The negotiator must show that if it weren't for property owners' selling or dedicating land to public use there would be no streets, parks, libraries, city halls, schools.

To be persuasive the agent must have all of the facts about the property and neighborhood at his command. In short, he should know more about the property than does the owner himself. He must check public records and title company files to learn the latest sale date and price, mortgages, trust deeds, taxes, assessments, liens and completion notices. Armed with the facts, including the appraisal, the land agent, provided he

Los Angeles board prefers to deal directly with a property owner. This method avoids a broker's commission or attorney's fee and reduces sales pressure from real estate promoters.

also is a good salesman, generally can make a satisfactory deal.

When negotiations begin the property owner is told frankly that the board contemplates the purchase of his property, rather than the agent's concealing the identity of the would-be purchaser.

The owner's natural inclination is to boost the price. And inclined to demand the most, it seems, are owners who complain the loudest about paying taxes.

This attitude can, however, be changed and is changed with patience. Then, when the deal finally is completed, the seller holds a much higher regard for the board than if he had been deceived.

The old adage "Haste makes waste" certainly is true in the buying of land. School boards or administrators that insist that real estate deals be hurried unknowingly are costing the taxpayers money. A few deals can be closed with one or two interviews, but most require many meetings and patient dickering.

PERSONAL MATTER

Negotiation should be kept a secret as it is a personal matter with the owner. Agents in quizzing banks, real estate men, and neighbors to gather price information and other data should exercise care so as not to embarrass residents by revealing such private information. Also, it is desirable that secrecy be maintained regarding the search for a site in any area until the board has come to a decision, for these reasons:

1. When "word" gets out that "someone's land may be taken for a new school," it may cause a terrible unrest in the neighborhood, and thus may be bad public relations.

2. Knowledge that a site is sought naturally tends to send prices up, making it more difficult to acquire the property at a fair, reasonable figure.

The Los Angeles board, therefore, presently is seeking to modify recent state legislation banning secret board meetings, to permit discussion of school real estate matters in private.

When a land agent and the owner agree on a price for a desired piece of property, an option is taken setting forth terms and conditions. Then, upon favorable action by the board, the deal is placed in escrow.

Most transactions are completed within four months, but often there are delaying complications—some

trivial, others serious. Subdivision delays, delays in clearing titles, finding heirs to estates, or overcrowded court dockets—in the case of condemnation actions—have held up deals for as long as five years.

Once the title is obtained, the former owner or tenant is given notice to vacate, and the buildings are advertised for sale in accordance with law and auctioned off.

In the event the land agent, using all his facts, figures and diplomacy, is unable to close a satisfactory deal, an action in eminent domain is started in the court.

I repeat, that this condemnation action is used only as a last resort. Our real estate section employees are instructed never to use the power of condemnation as a threat, and this policy has been obeyed faithfully.

When such action is advisable, the procedure is carefully explained to the owner, so that he will be fully posted on the matter. We actually tell him, tactfully, that it is his duty to protect his own interests and that he has a perfect right to his own opinion as to the value of his property, though it might vary widely from that of the appraiser.

It is pointed out that in a condemnation suit the court is not to be considered as a battleground between a citizen and a public agency but as a court of equity where he will receive just compensation for his property.

The governing board passes a resolution declaring the necessity for the land acquisition and authorizes filing suit. A title search then is made to learn names of the parties having an interest. This includes encumbrancers, lessees, lien holders, owners of easements, outstanding taxes or other interests. All are named defendants.

Negotiations should be kept secret.

If a board has no agent, it should get

at least two independent appraisals.

Sites usually cost more when obtained

through court condemnation action.

The complaint must allege, among other items, two things: (1) the purpose for which the property is sought; (2) that a public necessity exists for the property.

Testimony as to the market value of the property is given by the appraisers, who must qualify as expert witnesses. Opposing counsel will work unmercifully to discredit a witness in the eyes of the jury or court by elaborating on his lack of knowledge on some minor detail. Witnesses should, therefore, be fully prepared and posted in advance on specific rules of evidence, to avoid being tripped.

Final price which the taxpayers must pay for the land is up to the court or jury.

TWO APPRAISALS

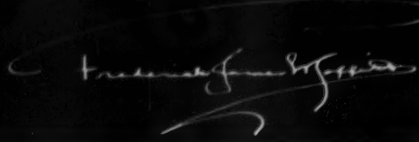
If a school district is without its own facilities to purchase land, it should engage at least two reputable appraisers when the time comes to purchase property. Two appraisals should be made and submitted entirely independently of each other. The appraisers should be allowed ample time to prepare careful and thorough appraisals. Then, if the property is purchased at a price close to the appraisals, a minimum amount of trouble will be experienced.

After handling the purchase of hundreds of parcels of land and thousands of other deals for vacation of streets, alleys and easements, our real estate agents are thoroughly sold on the idea that school sites generally cost more when acquired through condemnation.

In other words, it pays to negotiate.

In a succeeding issue Mr. Burns will tell how sites are selected by the Los Angeles school system.

CHALK DUST



LOOK WHO'S HERE

The Cap-and-Gown Man

SPRING HAS TRULY ARRIVEN only when the Cap-and-Gown Salesman grinningly comes with his swatches of cloth, tassels of gold, and promises of positive delivery next June. The Cap-and-Gown-Man is the Great Leveler, for he takes the lilies of the field and garbs them in prison gray so that the offspring of the rich and the poor, the tall and the short will be reduced to a common denominator at only a few bucks per reduction. Meanwhile, papas prepare for the usual June onslaught on the family pocketbook, for they well know that even a glib Cap-and-Gown-Man cannot reduce the number of dances, receptions, parties, proms and coming-outs which make up the Great American Commencement.

Gaily the salesman produces his samples of many colors—gray or black, red or white or blue. One would naturally assume that the school administrator, having lost his former job over a little matter of band uniforms, would be wary, but no! He falls into the same old trap, and the salesman soon departs with an ample promissory note.

On the day after the promised day, after many threatening wires, cables and telephone calls, the gowns arrive. The caps are delayed to cover the heads of a neighboring district. Despite the forehanded measuring and calibrating, it would seem that the gowns were constructed for a prekindergarten graduation or a school for professional basketballers. The Home Economics Department is called from its annual fudge party to bind, gusset and rivet into some resemblance to human form. There is a great pressing and steaming in the community, for the mammas are positive that all of the caps and gowns were last used at a soup-eaters' contest.

Finally, it is done, and the Commencement parade proceeds. Orchids and such-like are pinned on the gowns

of the rich to distinguish them from the less fortunate. Two or three members of the class get completely tangled in excess gown, and there is a ripping and tearing as the paraders trip on their way to glory. A few outside mortarboards fall into the laps of the audience as souvenirs. But democracy and equality are well, even if squirmingly and hotly, served!

True, a few painful items may demand future attention. The unclaimed, unpaid and unused gowns of those who didn't make it, the morning-after collection when the enthusiasm has abated, the warning threats from the next community which needs the self-same impedimenta for an early morning rehearsal. But these are trifles which the Cap-and-Gown-Man will not emphasize on his next trip to the district.

MEMO TO LAURA

Dear Laura:

When you told me today about the flattering position which had been offered to you by one of our great industrial companies, I was struck by one question you asked. "I wonder," you said, "if the job is as important as it sounds?"

In these days of tensions and insecurity, there are many important jobs which must be done that our beloved country may be safe and free and strong, but truly I believe that the work you are now doing with children is the most important work in the whole world.

For, as a trustee of our most precious resources, you are dedicated to America as it is and as it will be. You are working with the present and the future. From the clay of reality and the mist of dreams you are molding the shape of things to come. You are responsible for both the substance and the striving, the hopes and the fears, the disappointments and the successes

—the power and the promise of what can come to pass.

It is not an easy job you have, Laura, for you know better than I what hard, patient drudgery lies in teaching the skills that make for competency. You know what courage it takes to teach the truth when the truth is so hard to find. You and I know that it takes great friendship and understanding to teach friendship and understanding, tremendous vision to interpret the stuff of dreams.

But you are doing this job and doing it well—and as long as you can dream and plan and work in this job, so long will a little part of America continue to be strong and safe and free.

—F.J.M.

FRAME OF REFERENCE

AFTER ATTENDING a conference of school folk last week, writes W.L.G., I thought I had heard the last sesquipedalian word in pedagese and pedigobble. But, alas, I had little realization of the lengths to which school people will go to make themselves misunderstood.

In the current issue of a national education magazine (not *TNS*), I stumbled on the word "cafetorium," meaning, I suspect, that part of the school building which, owing to the economy program, serves as an assembly hall and the place in which the kids eat their lunches, to the detriment of both pleasant eating and competent dramatics.

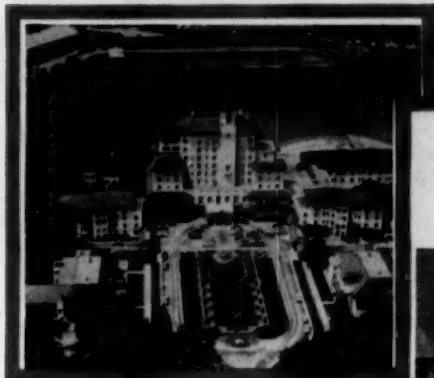
This cafetorium business is a beautiful sample of our love of words. If cafetorium, why not auditeria? How about the gymnasium or the audasium where basketballs splatter the unguarded windows? In the small school, a cafaugym after lunch becomes, presto, a gymauditeria in which the little ones merrily pelt the basketballers with left-over pie until the audigym is made ready for the evening meeting of the members of the Parent-Teacher Association.

There is no doubt that our school administrators will fully exploit all of these possibilities for a frame of reference for future Rotarations and Kiwanianastrophes!

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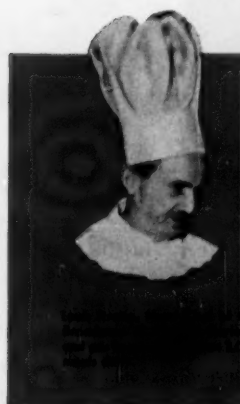


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THE SCHOOL LUNCH

Conducted by Mary deGarmo Bryan

The educational program, including the school lunch program, is planned at preschool and postschool clinics. Supt. Woodham (far left) works with teachers, the county lunchroom supervisor, the board chairman, and parents.

Involve public and all personnel in

Cooperative Planning

W. J. WOODHAM Jr.

Superintendent, Escambia County Schools
Pensacola, Fla.

THE real pay-off in a school lunch program is the effect on individual students. The extent to which the school lunch program is a part of a total school program depends upon how well that program is handled in each school center, and that depends largely on the philosophies of education held by the people in the county or in the city in which the school is

located, as well as on the philosophy of the people who work in the school.

We in Escambia County, Florida, think that, in order for the school lunch program to fulfill its function as a part of our educational program, it is vitally essential that we have cooperative planning at all levels in our county school organizations. I do not mean to say that cooperative

planning is not important at all levels. But if the lunch program is to be a vital and integral part of the total educational program, it's quite necessary that these people be in immediate contact with the boys and girls in school and that they have the opportunity to plan together. In this way all of the opportunities afforded by the school lunch program, from the standpoint of improving the educational program, can be utilized.

In Florida, and I think that many other states have similar plans, we have what we call preschool and postschool planning clinics. During these periods we bring together members of our school staff and our outside consultants to help us in planning our educational program. In the individual school centers, the group comprising the staff of that center—members of the faculty, transportation employees, custodians, lunch personnel—participates in planning the program to be carried on in that

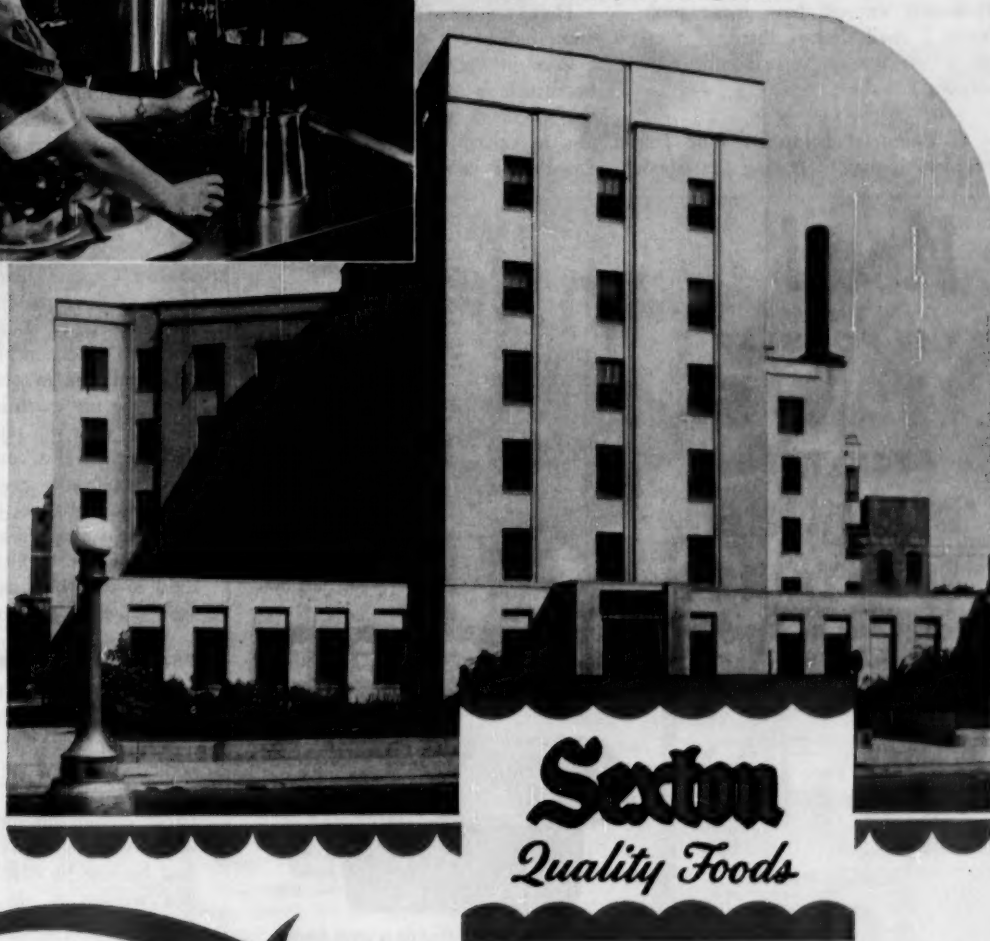
The service of the school in providing an adequate noonday meal to youngsters definitely contributes to their physical development.



From an address before the American School Food Service Association's eighth annual convention, Miami Beach, Fla., November 1954.



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JOHN SEXTON & CO., CHICAGO, 1955

particular school during the year. Likewise, these individuals are brought into frequent clinics to evaluate the effectiveness of their program.

We have made much progress toward getting the general public to recognize the importance of the school lunch in our educational program. However, we still have many problems. I shall discuss three of these as I, as county superintendent of schools, see them.

1. Financial Support. The first problem is that of getting the school

lunch program established on a sound and adequate financial basis. Not only do we have competition for the tax dollar, but we also run into objections from many other sources when we mention making the school lunch program a part of the *total financial program* for public education.

Here are some of the objections: Some individuals say that they do not believe in the school lunch program because it is socialistic in nature. If they believe that, then they might also say that public education itself is socialistic or that provision of trans-

portation and free textbooks to school children is socialistic.

There are others who say that it's the parents' responsibility to feed the children; therefore, the school should leave that up to the parents. If I understand the school lunch program and the way it operates in our county correctly, it certainly is not our intention to take this responsibility away from the parents. We are simply helping parents to assume this responsibility more effectively. We have suggested that tax sources should be utilized to support the school lunch program. Parents are accustomed to paying for services through taxation. That is the American system.

Others suggest that the school lunch program is nonessential. Some of the same individuals would say that physical education, music and many other subjects in our education program are not essential. If they were familiar with the reports of Selective Service and also considered the cost of public health services and the cost of public welfare, I think they would agree that the service of the school in providing an adequate noonday meal to our youngsters contributes to their development physically.

OBJECTION ANSWERED

Occasionally, we hear someone say, in regard to the school lunch program: "I didn't have it, and I got along all right." We can ask these objectors: "Well, your father didn't have the latest model automobile, either, did he? And he didn't have television. Just because he didn't have them, are you willing to do without them?" Certainly they are not. But these are some of the arguments we hear.

We say that the school lunch program should be placed upon a sound financial basis. That is essential if we are going to have continued progress in our school lunch program.

In the first place, in many areas we have to charge pupils entirely too much for their lunches. This is necessary because the youngsters are being called upon to pay the *total cost* of the school lunch program. A sound basis of financial support for our lunch program would reduce the cost to pupils to a minimum and give the youngsters a well balanced meal, as well as provide necessary equipment for storing and preparing food.

Another reason for setting up the program on a financial basis is the
(Continued on Page 97)

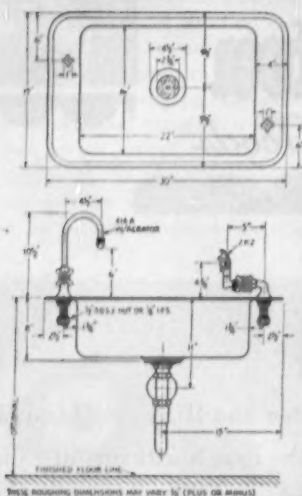
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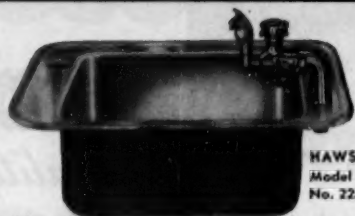


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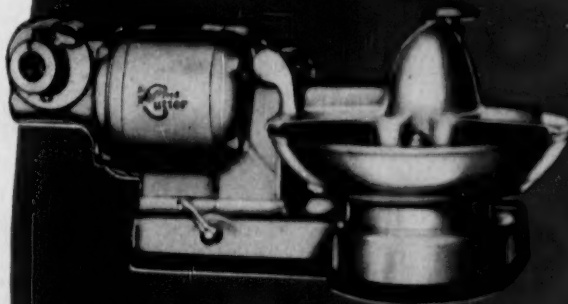
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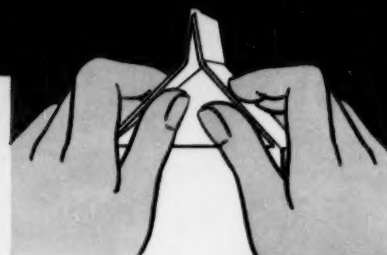
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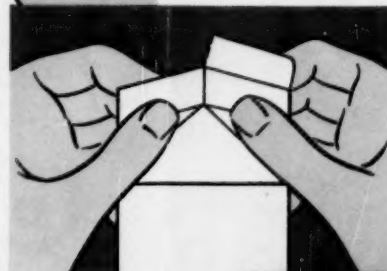
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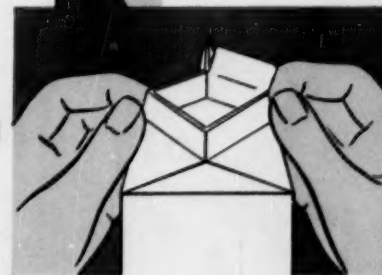


① Grip with
thumbs and
first fingers as
pictured

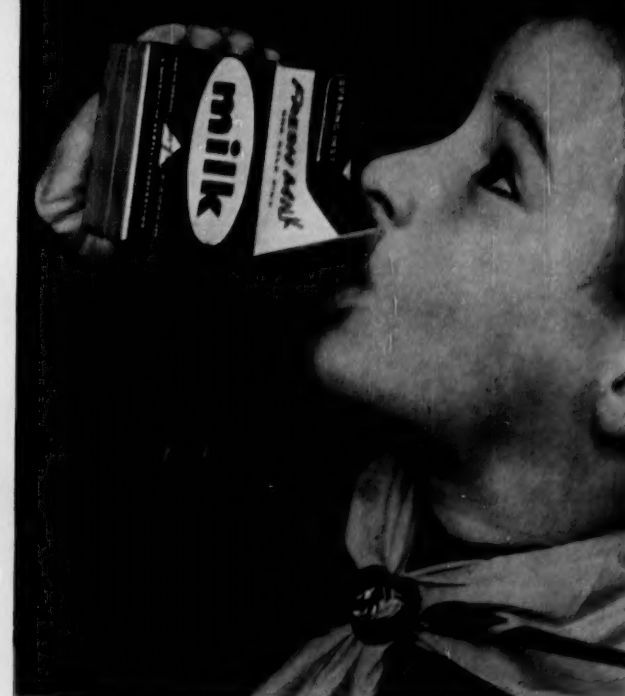


② Spread
wings, break-
ing top seal;
fold all way
back

③ Release
thumbs; move
spout forward

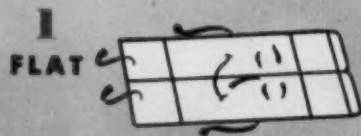


Pure-Pak
© RA-CELL-CORP., DETROIT, MICH.
YOUR PERSONAL MILK CONTAINER



PURE-PAK CARTONS ARE FRESHLY MADE AND STERILIZED RIGHT IN YOUR DAIRY . . . JUST SECONDS BEFORE BEING FILLED

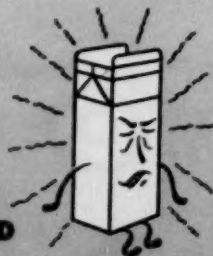
Pure-Pak IS MADE IN ONE
AUTOMATIC OPERATION



2
FORMED



3
HOT
PARAFFIN
STERILIZED



4
CHILLED



5
FILLED THRU
OPEN TOP

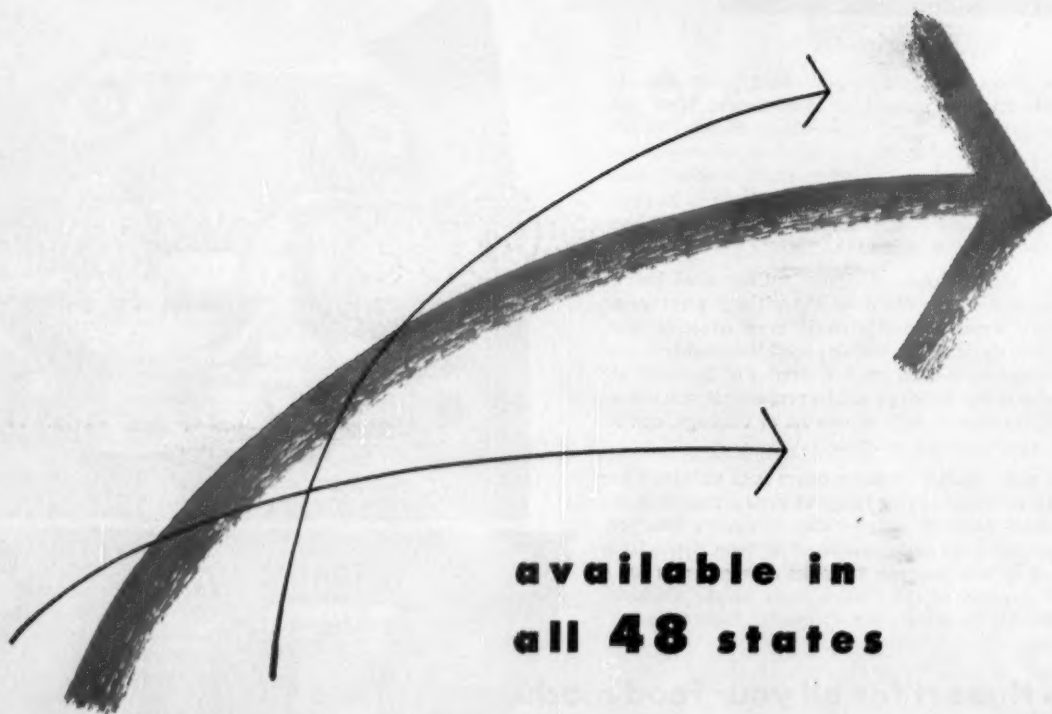


6
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HERMETICALLY
SEALED



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MILK IN**

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all 48 states**

FREE VISUAL AID

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NUMBER OF COPIES
DESIRED OF POSTER

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SCHOOL _____

ADDRESS _____

CITY _____ STATE _____

☐

Our school is now using Pure-Pak cartons.

☐

After learning about this much better way of getting
milk for our children . . . we are going to ask for
milk bids in Pure-Pak cartons from now on.

(Continued From Page 94)

matter of salaries. I think that lunch personnel should receive salaries comparable to those of other individuals employed in the community doing comparable work. This is essential if we are going to be able to hire qualified personnel. To me, it doesn't make good sense for a janitor in a school to receive twice the salary of the lunchroom manager. It doesn't make sense to me to say that we can use tax funds to pay bus drivers, but we can't use tax funds to pay lunchroom personnel.

The school lunch program should be considered in our total financial program, not as something in a separate package. We don't do that for transportation, for health service, janitors and the like, so why should we do it for school lunch?

2. Inadequate Facilities. The second problem at the local level is lack of adequate facilities. Many lunch programs are housed in temporary, substandard quarters, in basements. In many places there is insufficient space for students to get in to sit down for a meal.

The environment in the lunchroom is of particular importance. Our schools should be provided with cafeterias that are inviting to young-

sters. Lunch personnel should be brought into the planning of school buildings. We have tried this and found that by bringing these persons into our planning we were able to provide more satisfactory facilities and to reduce costs.

We have found it extremely unwise simply to say to an architect that we want a cafeteria in a school and that the school will have 700 pupils. There are some architects, like some county superintendents, who don't know much about arranging kitchens, locating disposal units, or providing storage.

We must have adequate facilities if we are going to serve the youngsters their lunches as we would like.

3. Qualified Personnel. The third problem is obtaining and holding well qualified personnel. I have already said that if we are going to do that, we have to have salaries that will attract well qualified people. But the real key to the success of a school lunch program is the manager and the members of the lunch staff. It's highly important that the manager be able to organize the staff, so that it can do an excellent job not only in the preparation of food but also in public relations within the school and outside the school.

It's important that the lunch manager have sufficient training and background to plan well balanced diets for the noonday meal and to assume responsibilities in the field of purchasing and accounting. A school lunch program can be successful financially if the lunch manager understands how to purchase wisely within the budget set up for that program.

Another problem at the local level consists of records and reports. Our lunchroom supervisor spends a great deal of time on them. Of course, we have reports and records from all departments, but I mean that we should have well qualified lunchroom managers who are capable of keeping the records and reports involved in the lunch program. It should not be necessary to employ additional clerical personnel to do that job.

The lunchroom manager also is the key to the manner in which the lunchroom cooperates with the other phases of the educational program.

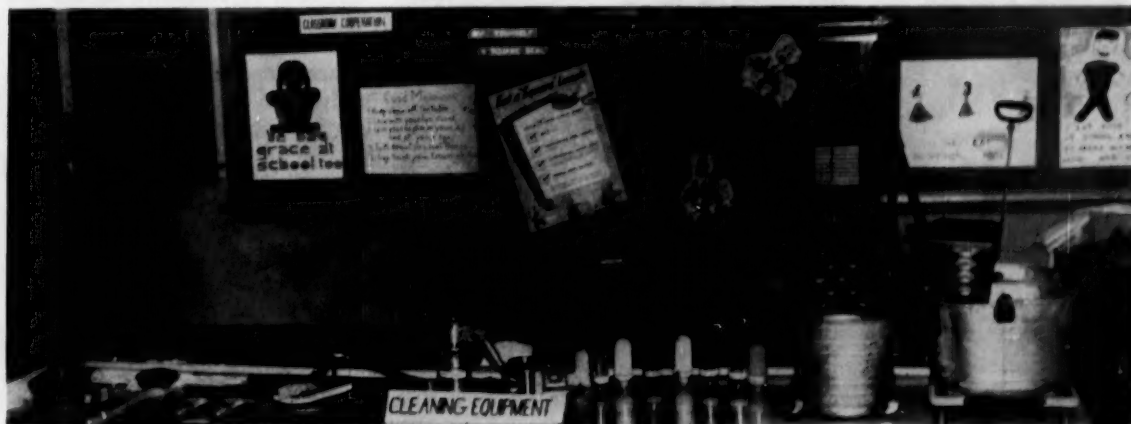
The future of the school lunch program depends upon what happens at the grass-roots level. It depends upon the extent to which lunchroom personnel in individual school centers can get both school personnel and the public involved in the program. The development will then move up to the state and national levels.

North Carolina, Maryland School Food Service Associations Meet

ONE of the exhibits at the annual meeting of the North Carolina Food Service Association at Durham was this display of cleaning equipment. It was organized by pupils of the Forsyth County schools, Winston-Salem, under the direction of their county lunchroom supervisor, Sara Taylor. Annabelle D. Selph, director of school lunchrooms for Durham, is president of the N.C.F.S.A. Mary deGarmo Bryan, director of the school lunch department

for The NATION'S SCHOOLS, addressed this convention on the "Educational Aspects of the School Lunch."

Mrs. Bryan also discussed "Goals for the School Lunch Program" at the first annual meeting of the Maryland School Food Service Association in Baltimore. Rachael Boyd, supervisor of the school lunch program for Cecil County, was elected president of the M.S.F.S.A. at the organizational meeting.



AUDIO=VISUAL

INSTRUCTION AND FACILITIES

How an Adequate Audio-Visual Program was developed in an 8000 pupil district

GLENN E. MURDOCK

*Superintendent, La Mesa-Spring Valley School District
La Mesa, Calif.*

ONE objective of a sound audio-visual program is to provide instructional tools of good quality for use by teachers and students when and where they are needed. By "audio-visual materials or tools" I mean any media that may be used by the teachers or children to assist in better communication or understanding.

We administrators have a job to do—and do efficiently—if teachers are to make the most of instructional tools. The best of materials a week late, or under improper circumstances,

is of little value for good teaching. Conversely, poor or inadequate materials serve an unhappy purpose, regardless of availability or quantity. Conditions under which materials are to be used are of great importance. A good film divorced from a proper environment, used in a poorly ventilated room, might as well be left on the shelves of the depository.

Every school district faces the problem of deciding what type of audio-visual program it will have and how it is to be obtained. It is axio-

matic that no district will have a better program than it wants. Probably the most important factors in determining the type of program desired are the quality of the staff of a district and its attitude toward using a maximum number of teaching media for the instruction of children. We learn through our various senses, and good teachers utilize as many experiences as possible to reach these senses.

All of us are familiar with the various means by which audio-visual materials may be provided in school districts. All services may be contracted for from outside sources, or a district may develop a state of almost total independence. Most of us, however, will find our position somewhere between these two extremes, and to which side our position is skewed will depend upon many circumstances. Among the factors that must be considered are the size of the district, the ability of the district to finance a program, the willingness of those in responsible positions to provide the necessary materials, the attitude of the staff toward the use of audio-visual materials, the quantity of the material presently available, the quality of the material available, and the difficulty of scheduling materials because of time, distance and delivery problems.

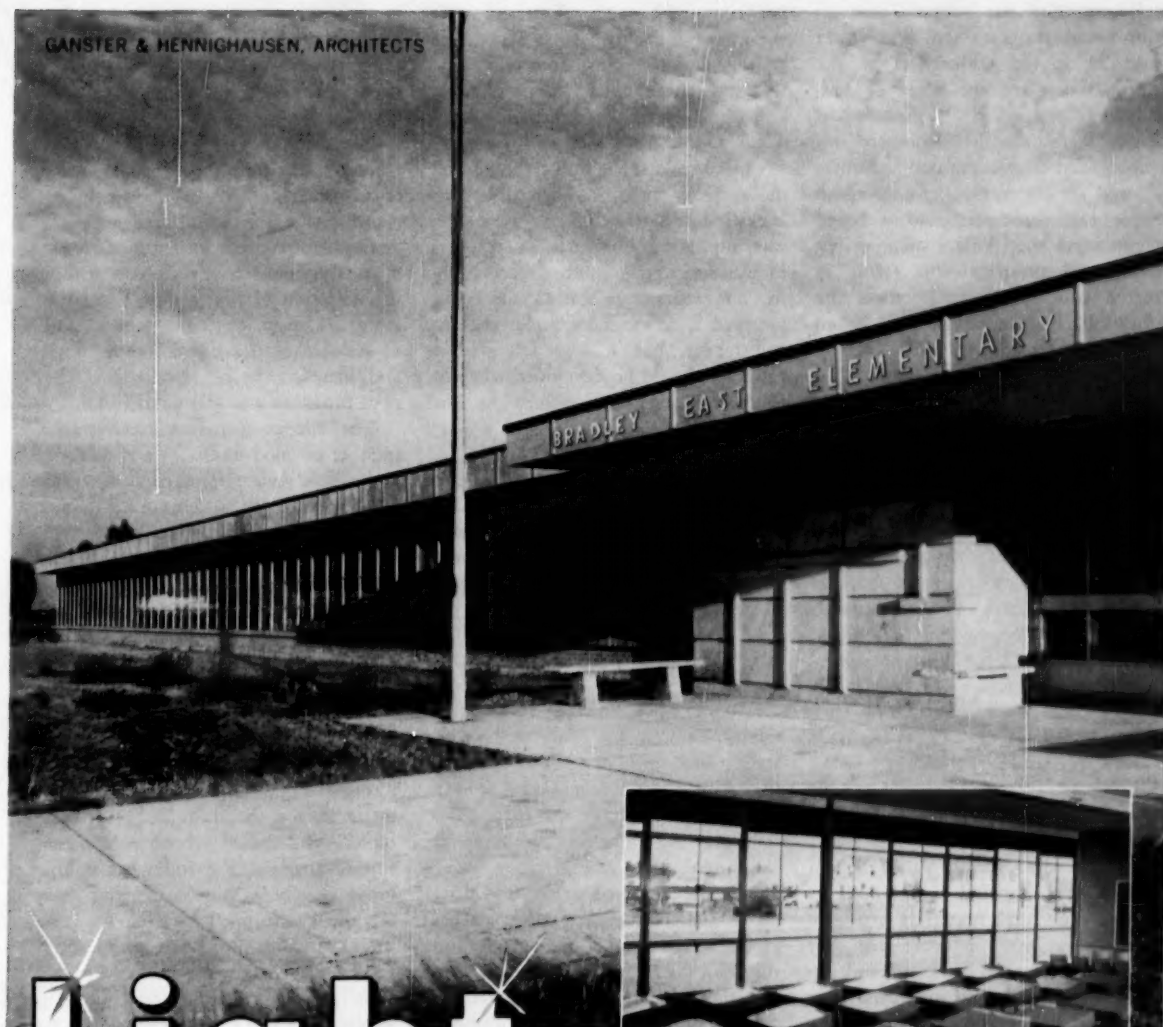
One of the most important factors

A sixth grader at La Mesa-Spring Valley, Calif., surveys the audio-visual equipment purchased and made in one year under the present program.



Based on a talk given by Mr. Murdock at the fall conference of the Audio-Visual Education Association of California, November 5.

GANSTER & HENNIGHAUSEN, ARCHITECTS



Light



...and darkness, too

Darkness? What darkness? Well, if you'll take a sharp look at the classroom picture, you'll see that shades are installed at the windows. This means that the room can be darkened in seconds for the utilization of audio-visuals. Today, school administrators, architects and builders are consulting with their local Ampro audio-visual dealer for professional guidance in the many modern methods and techniques which can be employed to darken school rooms. Plan for audio-visuals while your school is in the blueprint stage. Remember: light is important . . . and darkness, too!

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in determining the support that an audio-visual program will receive in a district is the willingness of the administration and the board of education to support it. Most board members and administrators are not so interested in cheapness or quantity as they are in value. Audio-visual people can demonstrate to a board of education that dollars spent on an audio-visual program will result in greater educational value than the same dollars spent elsewhere. When they do, these dollars will become available for their use.

The classroom is one of the best places to start developing an audio-visual program. As audio-visual people work with teachers and other staff members in developing a realization of the values that can be gained through the use of the many devices with which they work, these teachers and staff members will pretty well take care of the problem of demonstrating the need for adequate materials. If the need is sufficiently felt by those who work directly with children, the problem of support has been largely solved.

SNAGS IN OLD SYSTEM

Some years ago feeling developed in the La Mesa-Spring Valley School District that it would be desirable to have audio-visual materials available and close at hand in order that they might be inspected, reviewed and circulated for use by various classes, in much the same manner that library materials could be circulated. Because the teachers were depending on a source outside of the district to supply them with most materials, it was necessary to order, in the spring, the materials that were to be used during the following year.

The district over a period of years has been increasing in size some 20

per cent each year. Teachers who were new to the district in September and teachers changing from one grade level to another had a particularly difficult time in scheduling materials when needed, inasmuch as others had already developed a tight schedule on those items most in demand. This is easily understood because the source was supplying hundreds of teachers in addition to the number who taught in our district. The services we received were excellent under the circumstances, but it was felt that a program should be developed whereby teachers could obtain films as and when needed.

SPECTACULAR GROWTH IN DISTRICT

Our district was showing a consistent growth, and it was evident that by the beginning of this school year our school population would be in excess of 8000. Careful studies had been made to determine the minimum ultimate size of the district, and this figure was believed to be from 25,000 to 30,000 students. A committee was appointed to study the entire audio-visual program and to make recommendations regarding the path we should follow in the future.

It was the recommendation of the committee, after careful study, that a person be employed to serve as director of the instructional materials program, which should include not only the so-called audio-visual materials but those in the library as well. It further recommended that the money that was being budgeted for audio-visual materials be augmented and used to purchase materials to be retained within the district and circulated from our central office in the same manner that library books are circulated. Furthermore, it was suggested that these recommendations, and any resultant action, be explained

to the entire staff in order that the teachers might understand the transition that was taking place and the reasons back of it. This plan was outlined to our board of education and was accepted. A director of instructional materials was employed as recommended.

An evaluation committee was organized to confer with the director of instructional materials concerning the direction of the program and the materials most urgently needed and to act as a review board for the films and materials to be purchased. The new program was started last fall.

The district owned a considerable number of good filmstrips and records, and others were purchased as a means of supplying the schools until sound films and other items could be provided. Some of these filmstrips and records were placed in individual schools, but most of them were retained for circulation from the depository.

PURCHASES FOR EACH CLASSROOM

One of the first problems tackled by the advisory committee and the director was determining what equipment should be provided for each typical elementary school. As a result of this list, the following equipment has been purchased, and each school is equipped as follows: two motion picture projectors, six or seven record players, three screens, three or four projection carts, four filmstrip projectors, one tape recorder, one radio, two or three microphones with stands, one auditorium P.A. and record player, and one auditorium screen. All classrooms can now be darkened with draw draperies.

In addition to the foregoing equipment, schools may borrow from the instructional materials center the following equipment: opaque projector,

Materials that arrive a week late are of little or no help. Prompt circulation demands a central repository.



Instructional Materials Center at La Mesa-Spring Valley handles library resources as well as "A-V materials."



PROVING GROUNDS

What better evidence of built in quality and durability in folding table and bench equipment can be presented than the picture at the right which shows Schieber units still sound and serviceable after 24 years of daily use? Yet Schieber engineering goes on and on seeking methods and materials for improving on the equipment and making it possible to build schools for less.

1931

First Schieber installation, Oliver Wendell Holmes School, Detroit, Mich. Still in good condition and in daily use 24 years later.



Let us supply complete information

1954

Schieber In-Wall installation in beautiful new Lincoln School, El Dorado, Kansas.
Architects: Leaper & Gilbert, A.I.A., Wichita, Kansas.



* Proof, not Promises!

Schieber was the first to develop a practical lunchroom unit for multiple use of space. The equipment has stood the test of time. The first installation made 18 years ago is still in daily use. There has never been occasion to enforce the Schieber guarantee.

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8 built-in advantages of SCHIEBER equipment

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- 5 Safety locking devices to prevent accidents.
- 6 Forged steel, brackets and hinges. No castings.
- 7 Tight fitting, bright stainless steel edges.
- 8 Tables and benches may be used separately. No connecting bars or obstructions.



IN-WALL • PORT-A-FOLD • MOBIL-FOLD

overhead projector, standard slide projector, and micro-projector.

A survey of our materials center reveals that to date we have purchased 113 films. We have 162 films on lease-to-purchase agreement and 51 sponsored films that have been issued to us on the condition that we serve as a depository for them. There are 871 filmstrip titles available for circulation from the depository and 220 titles on deposit in various schools. There are 783 records and albums available in the depository for circulation and 100 records and albums

assigned to individual schools. We now have 360 art and study prints sets for circulation. Our collection in all categories is growing as we work with the staff members and the committee to determine needs.

Our business manager has carefully estimated the cost of the program. His figures indicate that if a district of approximately 8000 youngsters started from a position of owning no equipment whatsoever and wished to equip its schools fully with equipment similar to ours (excluding darkening draperies for classrooms), the initial

cost would be approximately \$5 per child in average daily attendance. The supplies and materials, including films, filmstrips, study prints, and maintenance and delivery, would cost approximately \$3.20 per pupil and the salaries, including maintenance and delivery, would be approximately another \$3.20, or a total of \$11.40 per child.

It is obvious from this then that when another school of approximately 600 youngsters is added to our district we should budget \$3000 for audio-visual equipment, excluding darkening draperies. It is further estimated that, in order to maintain the program once it is established, under present conditions a district should budget approximately \$1.25 per pupil per year for equipment; \$1.60 per pupil per year for supplies and materials, including maintenance, and \$2.20 per year for salaries, including maintenance and delivery, or a total of \$5.05 per student per year.

INITIAL COST OF SIMILAR PROGRAM

In round figures I think it would be reasonable to assume that in a district of 8000 youngsters, one should budget from \$10.50 to \$12 per child if the program is to be inaugurated all in one year. Once a program is established and growth is stabilized, it would seem that a figure of from \$4.75 to \$5.50 per pupil to maintain such a program under present circumstances might be a reasonable estimate.

We are obviously experimenting. It has been difficult to find dependable guideposts that could tell us what, how much, where and at what cost. We have, therefore, worked closely with the entire staff in an effort to determine what money should be spent on this program in proportion to that being spent on other instructional media. Our audio-visual department is a buzzing beehive of activity. School staff members are pleased with the service and the availability of materials, and they seem to understand the shortcomings. It is the feeling of our district that we are getting excellent value received for the money that is being invested. Our evaluation and advisory committee is continuing its work. Its members work with the staff they represent constantly to upgrade the services that are available. The audio-visual program that has been developed is their program.

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(1) RCA Sound brings students a whole new world of drama, music, history and current events . . . sound makes every subject more interesting. (2) Provides students a new medium for group activity—plays, debates, round-table forums . . . practically a whole new curriculum without adding to your payroll! Every RCA System is tailor-made to your requirements—and budget. And don't forget . . . RCA makes a complete line of 16 mm sound projectors for schools.

For further information contact your RCA Sound Distributor or *Mail Coupon Today*.



Complete roster at your fingertips
Here's your master list of rooms, ready for selection—singly or in combination. Set up any distribution list you want in seconds.



Immediate switchover for emergency instructions
To issue general announcements, turn master switch to "ALL" position. Give explicit instructions—"talk" your students to safety.



May be equipped with intercom system
Your RCA Console can be equipped to provide two-way conversation with any room in your school at the flip of a switch.



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☐ Information on RCA Sound Systems for Schools.

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ACCOUNTING

SUPPLIES

EQUIPMENT

*Perpetual inventory and constant review
reduce total investment in a*

Standard Supply List

JON S. PETERS

*Educational Consultant, School Plant Operations and Maintenance
School Planning Laboratory, School of Education, Stanford University*

Based on information from

CHARLES A. BRISCOE

*Business Manager, Unified School District
Alameda, Calif.*

A FEW years ago in the schools of Alameda, Calif., warehouse items were piling up in some classifications and running short in others. The shelves were full of items with little or no turnover (Is anyone in the market for No. 8 crayons?), which repre-

sented a dead loss as far as the educational program was concerned. The money tied up in unused stocks could have been used much more advantageously elsewhere. A committee was formed to study the problem. Members were the business manager,

a primary school principal, an intermediate school principal, and a high school principal.

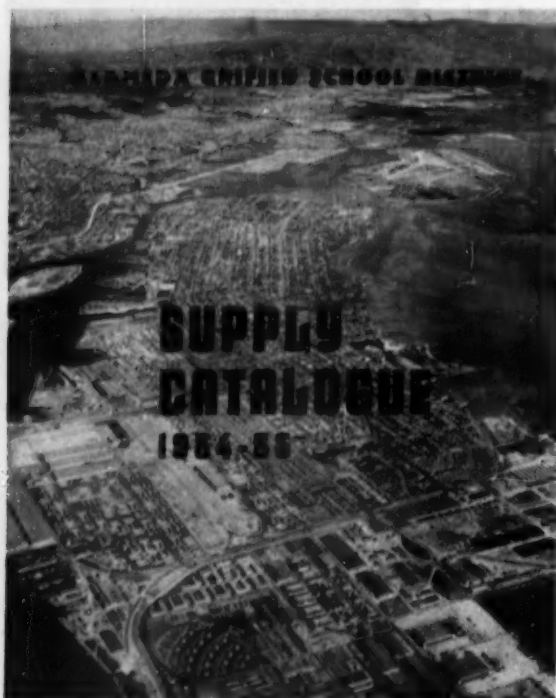
During the course of a year, meeting at least once a week, this committee examined the supply list item by item. Each item was evaluated on the basis of use in the schools and contribution to the educational program. Members of the committee conferred with teachers within the system to determine their evaluations of specific items, so that a new and revised supply list would be based on actual use.

At the end of a year's review of the supply list, it was possible to reduce the number of items by one-third, without adversely affecting the educational program. The new supply list is reviewed annually by another committee consisting of other primary, intermediate and secondary principals who determine whether to retain various items and whether to add new items. For example, the new supply list has eliminated 24 by 36 inch newsprint, has added 6 by 9 inch newsprint with $\frac{3}{4}$ inch lines, and has adopted a different kind of chalk.

If teachers requisition items not on the standard list, these requests are checked by the central office against available funds and by the department of instruction for acceptable use (mostly so that the department of instruction is aware of various materials that are being used by different schools and teachers).

Each of the schools in the district is on a budget for instructional supplies, library books, and so forth, and actual expenditures depend on the judgment of the principals and staffs at the schools. Although the central office keeps the accounts and prepares monthly statements to the schools, most of the schools keep their own running accounts so that it is possible to know at once the reserve status.

Warehouse supplies are requisitioned on a quadruplicate form (see illustration), one copy of which remains with the school of origin. The accounting office checks against funds



Teachers in the Alameda unified school district of California request instructional materials from a supply catalog. The lists are revised each year by appropriate committees. The catalog gives complete information about each item, including size, number in a package, and estimated cost. Maintenance and operation supplies are listed in the same catalog.

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Like all Finnell Fast-Acting Cleansers, Sanax is specially designed for the greater speed of machine-scrubbing, and works as effectually in a *Combination Scrubber-Vac* as in a *Conventional Scrubber-Polisher*. And because Sanax is processed from pure vegetable oils, it's *safe for all floors*.



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Finnell
11, 13, 15, 18"

Find out how you can simplify and reduce the cost of caring for waxed floors. *There's a Finnell Floor Specialist nearby to help you choose the waxes and cleansers that are exactly right for your needs. Finnell makes a complete line, so you can depend on unbiased advice. In fact, Finnell makes everything for floor care!* For consultation, demonstration, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 203 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



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- Leaves a lustrous anti-skid protective finish
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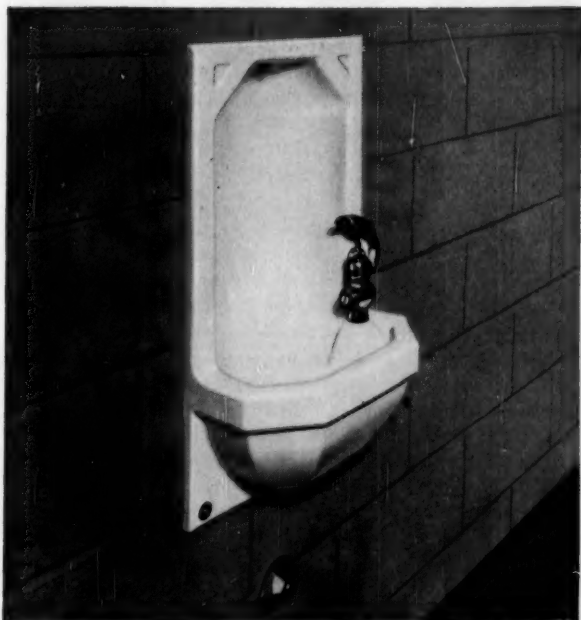
Originators of Power Scrubbing and Polishing Machines



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IN ALL
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CITIES

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Architects specify American-Standard Fixtures for progressive Ralph R. Smith School



THE CARDIC drinking fountain, near the cafeteria, is made entirely of genuine vitreous china. It is semi-recessed in the wall and has an anti-squirt bubbler with automatic regulator. The Cardic can be installed at any height convenient for the children using it.



THE MADERA toilet and the Hibben lavatories complete the fixture installation in the boys' rest room. All the fixtures shown here are made of easy-to-clean, hard-to-mar, genuine vitreous china.



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Vol. 55, No. 3, March 1955

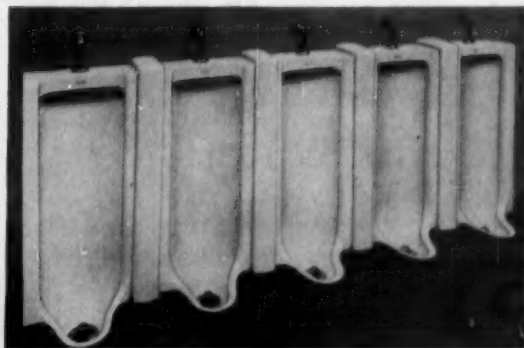
• This new elementary school, at Hyde Park, New York, was designed by the well-known school architects, Perkins and Will, and is an excellent example of modern school construction.

Outstanding among the school's many important features are the rest room facilities. In addition to the regular well-planned, multi-fixture washrooms, individual washrooms have been attached to many classrooms. "The item of individual washrooms and toilets takes much of the regimentation out of school . . . The toilets and washrooms are integral parts of the room, just as they are integral parts of the home. Students use them as they need to, and return to their work—all very natural and without regimentation or horseplay."^{*}

To continue their plan to afford pupils the best possible washroom facilities, Architects Perkins and Will then specified American-Standard plumbing fixtures for use throughout the school. American-Standard offers a complete line of school plumbing fixtures, many of which have been especially designed and constructed to meet the needs of very small children. From this extensive assortment an outstanding selection was made for this school. Several of these fixtures are shown here.

For more information on American-Standard plumbing fixtures and advice on your school plumbing problem, write **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.

^{*} From an article on the Ralph R. Smith Elementary School which appeared in the December 1953, issue of The School Executive.



THESE CHINAL urinals in the boys' rest room are equipped with a storage tank which flushes urinals automatically when water fills tank to a certain predetermined level, thus eliminating manually operated flush levers.



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USE your Bogen sound system for 2-way intercommunication with any classroom, for distributing recorded programs, radio broadcasts, activities originating from any classroom, emergency announcements, and for the many original applications you will think of yourself.

REGARDLESS of how much more you might spend, you cannot buy a more practical or more dependable sound system than a Bogen. Functionally designed according to the recommendations of the U.S. Office of Education, and built by the country's largest manufacturer of sound systems: David Bogen Co., Inc.

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Equal Opportunities for Minorities Is Nationwide School Problem

Book Review by **VERNON L. ARMSTRONG**

Associate Professor of Education
Drake University, Des Moines, Iowa

SCHOOLS IN TRANSITION (*Community Experience in Desegregation*). Edited by Robin M. Williams Jr. and Margaret W. Ryan. Chapel Hill: The University of North Carolina Press, 1954. Pp. 272. \$3.

THE Supreme Court decision of May 17, 1954, signaled the legal end of segregation and the beginning of a new era in American public education. As a landmark in a continuing struggle, it impels a working out in actual practice of the rights of individuals and minorities as proclaimed in our Constitution. The court, in reaching its decision, has applied in a specific context the philosophical and moral values written into our Constitution regarding the equality of men. Ours is a nation of law, and all men are equal before the law.

In the next decade every thinking person will be concerned in some way with the problem of integration. School administrators will be key figures in the actual process of desegregation in communities all over the South. School administrators in other parts of the country will continue for years to come to work at the task of making desegregation actually represent equality of educational opportunity.

It would be a mistake to view the problem as being merely one of desegregating the schools. All minority groups and every individual in our society are entitled not only to legal protection of rights but also to a situation in the community that allows the achievement of full citizenship. The schools are in the vanguard of those forces that seek to achieve a more democratic society, and it is inevitable that they will face many situations filled with tension during this period of rapid transition in social relationships.

We should admit that this is a crucial period—a period in which not only our people but the people of the whole world will be questioning our

ability as a nation actually to put into practice the rights of man in which we profess to believe. Although the immediate problem of desegregation is most acute in the South, the problem of integration—that is, of actually providing equal opportunities for minorities—is nationwide.

State legislatures and local school administrators must now devise the means for operating within a legal framework which forbids the segregation of pupils in the public schools because of race. Efforts to circumvent this necessity may delay the integration of educational programs but cannot evade it. If a state assumes any responsibility for education which requires the use of public tax funds (through private contract or otherwise), the state's obligation to provide for integrated educational opportunities regardless of race remains.

EXPERIENCES REPORTED

Mr. Williams and Miss Ryan report on the experiences of 24 communities in states bordering the South as they have moved from racial segregation toward integration in the public schools. Their work, based on case studies made in the summer of 1953, may give some guidance to educators and laymen in both the South and the North as they seek solutions to one aspect of the American dilemma.

The general problem of desegregation is drawn in Part I, with particular attention to the rôle of law in the patterns of racial separation and integration in the American school systems. The fact is emphasized that local school administration works within the framework set by state law and that enforcement is dependent upon state initiative. Eventually, of course, the problem must be solved within each community through the development of new school policies and through the initiation of a new pattern of social relationships.

The detailed case studies of the desegregation processes used in communities of various sizes are given in

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Parts II and III. Communities included have a wide range of ethnic compositions, economic bases, and geographical locations. All were of necessity out of the South, but most were in adjoining states, and many of the communities were "southern" in their intergroup attitudes. Of most interest to school administrators are the varying relations between different types of social codes and the actual behaviors supposedly regulated by them. It is of striking importance that the actual desegregation procedure was accomplished in every

instance with less difficulty than was anticipated by the school administrators. Despite predictions and threats of violence before the shift, there was no blood shed in any of the 24 communities studied.

As in other studies of administrative processes, an enormous range of different solutions and experiences was found, clearly illustrating that a local pattern of control of public schools is a keynote of American education. Despite the diversity of solutions, there were many underlying similarities in actions taken and in

the response to those actions. Mr. Williams and Miss Ryan conclude: "The community cases show, however, that desegregation is an uneven and shifting process, not a sudden massive change."

The editors seek to present a factual account of the experiences of many communities in desegregating their schools. They point out that many factors of sociological interest and significance were omitted from the accounts in the interest of keeping clearly in the forefront the actions and decisions of school administrators. Much editing was necessary to transform the many field studies into an integrated work, and for that reason one would expect the point of view of the editors occasionally to be apparent, with inadequate substantiation from materials presented. This becomes a minor fault if one considers the magnitude of the task and the difficulty of completing it in time to be useful to the many persons now faced with similar problems.

FACTS PRESENTED

The editors indicate that the main substance of the book lies in "what it may teach us about the working of our society and in what it may imply for a responsible approach to the new problems and opportunities we now face." It is quite difficult to stay with a factual reporting of such complex situations as are considered here, and the authors have done an admirable job of presenting facts which seem to be immediately related to the desegregation problem.

It would be most desirable to read "Schools in Transition" after reading its companion volume, "The Negro and the Schools," edited by Harry S. Ashmore and published by the University of North Carolina Press, Chapel Hill, in 1954. This study, made by 45 scholars, is a timely review of the education of the Negro in our country which provides the factual background that is needed if we are intelligently to meet the situations now facing us.

"Schools in Transition" was written to help the local citizens upon whom the final responsibility for the public school rests. The reader will not find in it the answers to his specific problems, but he certainly will become acquainted with many aspects of the problem that do not come immediately to mind and with a variety of attempted solutions.

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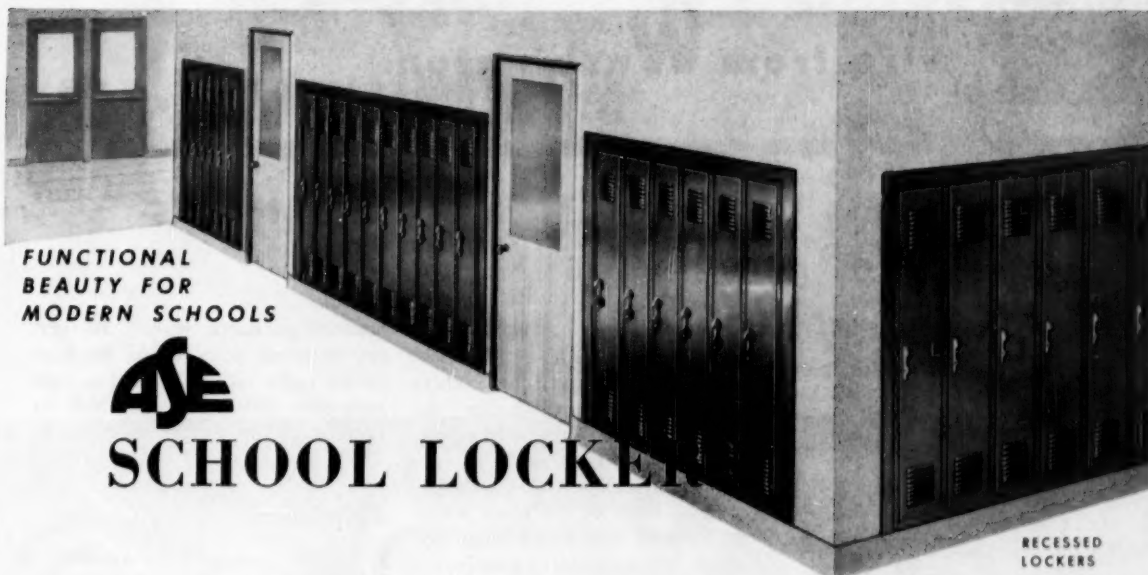
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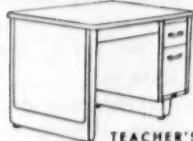
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By EDGAR FULLER

President's federal aid bill

► On the same day that the President sent to Congress his special message on school construction aid (see News, page 120) a 39 page bill (S. 968) to implement the Administration's program was introduced by 18 Republican senators. Five were members of the Senate committee which handles educational legislation; the sixth Republican member of this committee, Sen. Irving Ives of New York, was conspicuously not a co-sponsor. He and Senator Humphrey of Minnesota have introduced the same bipartisan grant-in-aid bill that is sponsored in the House by Reps. Carroll B. Kearns (R.-Pa.) and Cleveland M. Bailey (D.-W.Va.).

The Administration's plan proposes that up to \$750 million of local school bonds not salable elsewhere shall be purchased by the federal government during the next three years at interest rates not exceeding $3\frac{1}{8}$ per cent. It proposes to establish state school building agencies which would use a \$6 billion fund created through equal contributions by the states and the federal government to build schoolhouses and rent them to local school districts. It also provides for \$200 million for federal grants to states during a three-year period for the use of school districts unable to qualify for loans. Lastly, it authorizes an appropriation of \$20 million to be paid to the state education agencies during the next five years for the promotion of school construction.

Members of Congress acquainted with the problem have expressed major doubts about the future of the bill. Under its provisions they see little financial aid, high administrative costs, excessive red tape, above average interest rates, and long procedural delays.

The bill undoubtedly has more of the federal controls against which the President spoke in his message than any bill for general federal aid for

school construction introduced in recent years.

Members of Congress and others inquired immediately whether the states could legally and constitutionally carry out their part of the federal requirements within a reasonable time. Some of the states would have to amend their constitutions, and all would require special legislative action, including the four states (Georgia, Indiana, Maine and Pennsylvania) in which state school building authorities have previously been authorized. Most state legislatures meeting this year will adjourn before such a complex and controversial bill could be enacted by the Congress, and few state legislatures meet next year.

Serious doubts have been expressed that any possible benefits from the legislation could justify the time, expense and additional administrative agencies required for the states to qualify.

Another question is whether the school districts most in need of financial assistance could pay the rent on the buildings. This rent would exceed the rate of interest paid on regular state or local school district bonds. It would include a 0.25 per cent service charge in addition to expenses for maintaining and repairing the buildings and the administrative expenses of the special state school building agencies.

Members of the congressional committee dealing with education have frankly questioned the adequacy of the entire plan, contrasting it with huge federal grants of cash for highways and other physical facilities and referring to it as primarily for the benefit of moneylenders.

With the Congress in Democratic hands and the attitudes of its leaders as they appear to be, it is certain that S. 968 will not be enacted by Congress in its present form. Parts of the Administration's plan may be useful as a long-range program, but substantial

financial assistance within the next two or three years would be more certain under bills introduced in Congress since 1950, many of which are pending at the present time.

Third draft

► After several days of discussion on federal grants-in-aid to education, the Kestnbaum Commission has once again asked its staff to draw up an entirely new statement on the subject. The commission has long since discarded the report of its study committee on education, which was signed by a bare majority of that committee, and has now discarded a new draft written mostly by Chairman Kestnbaum.

The prevailing sentiment in the commission remains in opposition to substantial federal grants to the states for school construction and in favor of "tapering" federal grants in such fields as school lunches and vocational education. This is not surprising when the views of the commission members before their appointment to the commission are taken into account. It is significant that there have been several days of spirited discussion on the issues in education. There may yet be substantial compromises in the final position of the commission.

It is possible, for instance, that a waiting period of perhaps five years may be recommended before the "tapering off" period is supposed to begin in vocational education. This is realistic and understandable, because last year a recommended cut of \$1,173,261 by the Bureau of the Budget was hurriedly restored by the Bureau itself when the people began to express their opinions about it. Then Congress added \$5 million on its own initiative. This year the Administration recommends the same amount, but Congress may further increase it.

Last year the school lunch appropriation followed a somewhat similar path. It was "cut" \$15 million in the recom-

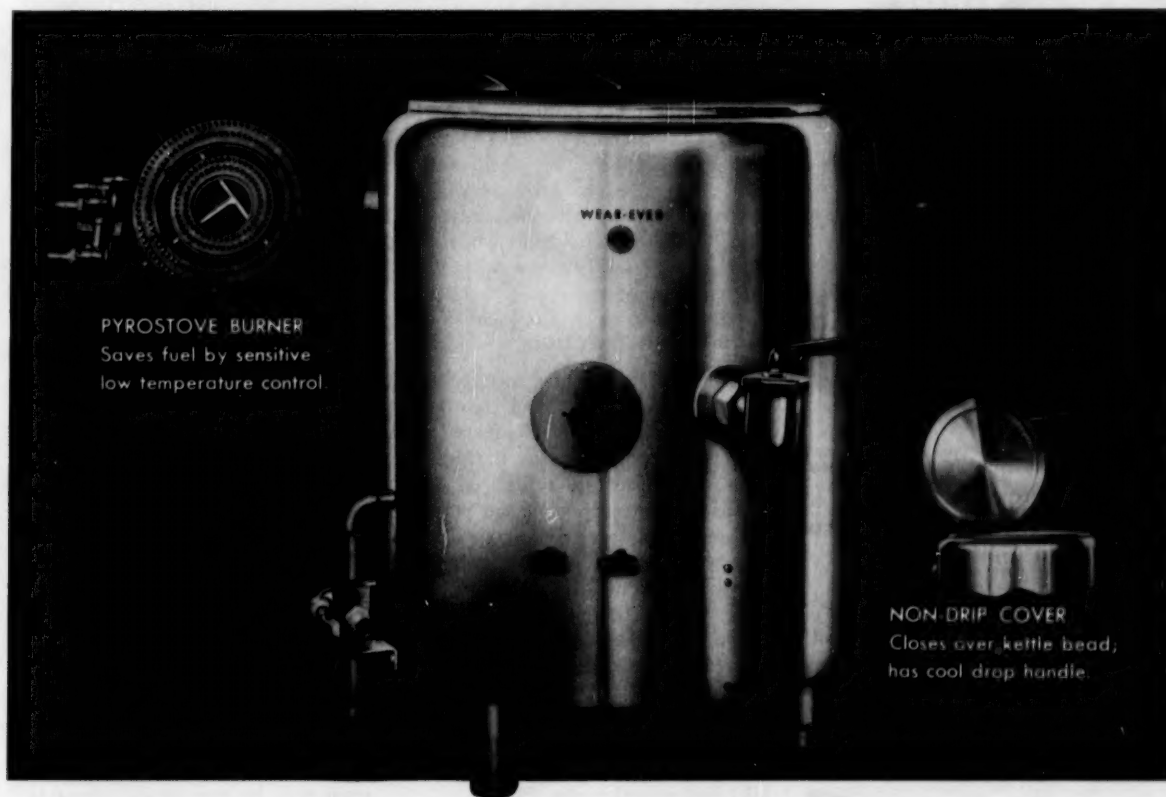
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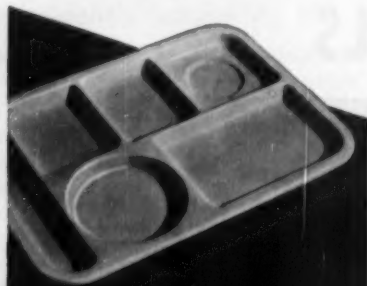
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mentations of the Bureau of the Budget. Part of this was restored in the House committee and the remainder was restored on the floor of the House. The Bureau has repeated its recommendation of a \$15 million reduction for fiscal 1956. Congress is not expected to follow the recommendation, although spokesmen for the U.S. Department of Agriculture have already begun their campaign to cut federal school lunch funds.

The Kestnbaum Commission will not oppose continuance of grants for school construction, maintenance and operation in the federally affected areas as needed. The Administration budget for 1956 for maintenance and operation is \$65 million, an increase of \$10 million; the recommendation for school construction is \$24 million, a reduction of \$46 million from the \$70 million appropriated for the current fiscal year. Congress is likely to vote whatever funds appear to be necessary in these federally affected areas when its appropriations for 1956 are made.

School construction

► The special presidential message on federal assistance for school construction first promised for February 15 was moved up to February 8. Meanwhile, Chairman Lister Hill of the Senate committee on labor and public welfare did not wait. His committee held hearings on federal assistance for school construction from January 27 to 31. Once again the need was clearly shown, and the testimony strongly favored the substantially similar bills already introduced by six senators (with 29 other senators co-sponsoring Senator Hill's bill and 23 other senators co-sponsoring Senator McClellan's bill) and several representatives.

The timing of this action stirred up a political hornet's nest. It was probably a factor in advancing the date of the President's special message. It also served notice on the Administration that Congress seeks a plan that will be of substantial assistance in financing the construction of schools without delay. Published reports have made Congress and the public fear that the Administration proposals may contain no such substantial aid provisions. Special riders on racial segregation have been suggested by die-hard opponents as a way to defeat the congressional proposals.

Whatever the plan the President may recommend, it will be in direct

competition with bills that have been slowly and thoroughly developed in Congress on a bipartisan basis after extensive hearings during the last five years. Most educational officials and other members of the profession believe that federal action affecting education must be kept, as nearly as possible, politically bipartisan. They believe they must work both with the Administration and with Congress to meet educational needs under sound principles of local-state-federal educational administration. The extent to which this will be possible, of course, will depend upon whether the Republican Administration and the Democratic Congress can agree to support sound legislation which will be of real assistance to education.

Major attack on polio near

► About April 1 the results in the 217 test areas where the Salk polio vaccine was used last year will be known. If these are impressive enough, the National Institutes of Health will license the vaccine and state health officers will immediately set in motion throughout the country programs to vaccinate all first and second grade pupils whose parents request it. This may be the first long step in eliminating or reducing the scourge of polio, of which children from 4 to 9 years old are the most frequent victims.

The Foundation for Infantile Paralysis, using contributed funds, will supply vaccine for some 9 million immunizations of first and second graders and for other children in the 217 test areas who have not been immunized. This vaccine will be furnished without cost to the state health officers, but all other costs of the program will be met in the states and communities. In addition, there probably will be enough vaccine available to provide another 9 million immunizations by physicians under private physician-patient arrangements with parents and others. Six of the nine companies manufacturing biologics in the United States are making the vaccine.

Local school and health officers will make their own program arrangements within the administrative pattern set by the state health officers. Chief state school officers will cooperate at the state level in bringing the program to local schools and school systems. The program will afford an excellent opportunity for continued development



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Citizens council for schools

► The Carnegie Foundation has granted \$500,000 to assist in the support of a National Citizens Council for Public Schools. It will be a successor organization to the National Citizens Commission for the Public Schools, which has been active in the cause of public education for six years.

Surplus property

► Since 1946 much more than a billion dollars' worth of surplus federal property has been donated to schools and colleges by federal agencies. During the last eight years this program has developed, in spite of unbelievable red tape, from distribution of 12 categories of military property for instructional purposes only to the present distribution of any surplus property from any federal agency for any purpose in education. Health agencies have been included since 1950.

Late in January the National Association of State Agencies for Surplus

Property met in Washington to combat the latest federal restrictions on the flow of surplus property to schools and hospitals. Chief offender was the Department of Defense, which has been auctioning off property covered by the law under an administrative directive since Feb. 1, 1954. Proceeds to the government are small, and speculators grow fat as the schools and colleges lose property Congress obviously intended they should have.

The Department of Health, Education and Welfare has also erected obstacles to efficient distribution of surplus property by requiring detailed "compliance" procedures for four years after schools or hospitals receive either real or personal property. The law concerning such "compliance" procedures applies only to real property; it has been extended by regulations of doubtful legality which apply to personal property as well.

The National Association of State Agencies for Surplus Property is asking Congress to clarify its intentions in amendments to the law. Its members are certain there was no congressional intention to impose the present H.E.W. and Defense Depart-

ment restrictions on distribution of surplus property to education and health agencies.

The Gwinn report

► After the 83d Congress went home last year, a special House subcommittee held seven days of hearings on federal activity in education. Ultraconservative Rep. Ralph W. Gwinn of New York was chairman. Other Republican members were Rep. Kearns of Pennsylvania and Rep. Young of Nevada. The minority Democrats were Rep. Elliott of Alabama and Rep. Landrum of Georgia.

The subcommittee was charged by Chairman McConnell of the committee on education and labor with the following responsibilities: (1) to ascertain which federal agencies are engaged in education; (2) to find out how much coordination of these activities there is in the U.S. Office of Education; (3) to inquire into the basic law creating and defining functions of the Office of Education and to conclude whether there should be a new basic statute; (4) to ascertain the influence of the Office in education and the influence of educational groups on the Office.

Following is the subcommittee report and recommendations in full, as contained on a single page in the 531 page volume covering the seven days of hearings:

"The subcommittee reports and recommends that

"1. An extension of the present inquiry be continued after the reorganization of the House in the 84th Congress.

"2. The Secretary of the Department of Health, Education and Welfare be required by legislation to report annually to the Congress on federal activities in education.

"3. The extension service of the Department of Agriculture be retained in the Department of Agriculture, but vocational education programs should be entirely under the supervision of the Secretary of the Department of Health, Education and Welfare.

"4. International educational programs should be under the operational supervision and direction of the Secretary of the Department of Health, Education and Welfare.

"5. The federal income tax structure be adjusted so as to encourage more individual and corporate contributions to colleges and universities."

The subcommittee recommendations

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do not cover the purposes of the investigation, of course, but many of the 531 pages make interesting reading. On the first day of the hearings, Commissioner Brownell described the organization and activities of the Office of Education thoroughly and effectively, setting forth his ideas about what the U.S. Office ought to be doing.

Chairman Gwinn also brought in a number of special witnesses who could be depended upon to give voice to his well known negative views about federal relations to education. He cross-examined other witnesses with leading

questions along the same lines. A majority of the other members of the subcommittee believe there is a national interest in education, however, and kept this sort of play within reasonable bounds.

The subcommittee counsel was Arad Riggs, a New York lawyer. His "summation by counsel" reflects generally the views of Chairman Gwinn. It also sets forth some interesting data, reporting that "... more federal departments and agencies are carrying on more educational activities than was true in 1950. . . . While the total

amount of expenditures (\$3.6 billion for 1950 and \$2.1 billion for 1955) has decreased, the diminution in amount has less significance when it is realized that the Veterans Administration expenditures constituted \$2,941,218,541, or 81 per cent of the total, in 1950, while only \$620,974,500, or 28.5 per cent, in 1955. If V.A. expenditures are not included, the remaining federal agencies spent nearly \$675 million for educational activities in 1950, as opposed to current expenditures of approximately \$1,553,000,000, or over twice as much."

The "increases" since 1950 depend on definitions of education, since most of them are accounted for by such agencies as the army, air force, Department of Agriculture, Foreign Operations Administration, General Services Administration, and the Housing and Home Finance Agency. There are many interesting bits of information meaningful to educational administration, such as that \$241,519,432 was appropriated for the U.S. Office of Education for the current year and that \$199,699,891 of this will be expended in the grant-in-aid programs to schools in federally affected areas. Administrative costs for the programs in federally affected areas will amount to \$924,280, and another \$480,000 is earmarked for administration of vocational education. All other functions of the U.S. Office of Education cost about \$1,500,000 per year for administration.

There are some misleading conclusions in Mr. Riggs' summation. Basing his comments on the testimony of one of Chairman Gwinn's special witnesses, for example, he emphasizes that one state gets back in grants only 1 per cent of what it pays in federal taxes and that even the poorest state gets back only 50 per cent. The implication is left that the remainder stays in Washington and that each state should expect to get back somewhere near 100 per cent. Of course, the total of all federal grants-in-aid amounts to only a small percentage of the federal taxes collected; present, past and future wars alone account for more than 80 per cent.

No one could complain a great deal about the five sentences that constitute the subcommittee's report and recommendations, but it is unfortunate that they suggest neither the original purposes of the hearings nor the major content of the subjects upon which the witnesses were heard.



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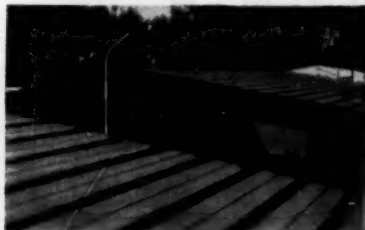
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ANOTHER SCHOOL INSTALLATION in Trumbull Elementary School, Trumbull, Connecticut, uses 14,000 sq. ft. Architect: Lyons & Mather, Bridgeport, Connecticut. Contractor: E. R. Smith, Inc., Stratford, Connecticut.

NEWS IN REVIEW

President Asks for \$1,120,000,000 Federal Loans and Grants for School Construction

WASHINGTON, D.C. — President Eisenhower has asked Congress to authorize \$1,120,000,000 to help with construction of schools in the states. The aid proposed would be in the form of grants and loan guarantees designed to help states build \$7 billion worth of school construction over the next three years.

In a special message to Congress February 8, the president said the program is urgently needed "to give our school children as quickly as possible the classrooms they must have." The president recalled the estimated shortage of 340,000 classrooms as he recommended what he termed an "emergency" measure.

Restating his fundamental belief that school action should be primarily at the state and local level, he went on to say in the message, "the present shortage of classrooms requires immediate and effective action that will produce more rapid results."

The major share of the appropriation (\$750 million) is intended to be used for purchase of school bonds issued by local communities. Other recommended appropriations are these: \$150 million to match funds put up by individual states to set up school building agencies; \$200 million in grants-in-aid to school districts economically unable to participate in the bond programs supported by the government; and \$5 million immediately (as part of a three-year total of \$20 million) to finance long-term planning by the federal government and the states to correct other problems confronting public education.

Delaware Supreme Court Rules Nonsegregation Not Authorized

DOVER, DEL. — The latest word on the Milford story is this: that the board of education there had "no legal right" to admit Negro pupils to an all-white school.

The Delaware Supreme Court ruled February 8 that the school board had no legal authority to admit pupils to school last September without prior approval of the Delaware Board of Education. The decision reversed a

finding in chancery court last October 19 which ruled that Negro pupils were entitled to attend classes.

Milford was the scene, in the fall of 1954, of a boycott by the majority of white pupils until Negro students were sent to all-Negro schools at Georgetown or Dover. It was in Milford that Bryant W. Bowles, director of the National Association for the Advancement of White People, conducted his campaign.

Lindley Replaces Lippmann at Denver Convention

WASHINGTON, D.C. — The stage is set for the next A.A.S.A. regional conventions. With the ceremonial opening of exhibits in Kiel Auditorium in St. Louis on Saturday, February 26, the big meetings for

school superintendents will be under way for 1955.

One change in general session speakers has been announced. At the Denver meeting Ernest K. Lindley, director of the Washington bureau of *Newsweek*, will replace Walter Lippmann, who has been ordered by his physician to cancel the convention speaking engagement.

Exhibits and general sessions will be held in the Kiel Auditorium in St. Louis, the City Auditorium in Denver, (March 12 to 16), and the Public Auditorium in Cleveland (April 2 to April 6).

Several last minute reminders have been suggested by Worth McClure, executive secretary of the association. The first reminder is, "If you can't come, cancel." Housing facilities in all three cities will be strained to

(Continued on Page 126)

Pictured here are headline speakers at the three A.A.S.A. regional conventions. Abbreviations after the names indicate the convention city in which each will speak: St. Louis, Denver and Cleveland.



Arch N. Booth (St. L.)



Sen. C. P. Case (St. L.)



W. H. Hager (St. L.)



Sen. Lister Hill (St. L.)



H. I. Willett (St. L.)



Sen. C. P. Anderson (D.)



Willard S. Elsbree (D.)



Ernest K. Lindley (D.)



Alvin N. Rogness (D.)



Gen. T. D. White (D.)



Francis S. Chase (C.)



Richard M. Nixon (C.)



Bishop G. B. Oznam (C.)



Beardsley Ruml (C.)



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The UNARCO DUAL-VECTOR is a *quality product newly designed* to make economically feasible the combination of a fine hot water heating system and a chilled water cooling system.

Now you can have all the advantages of hot water heat—cleanliness...smooth, even heat...quiet operation—and in summer, cool, conditioned air. DUAL-VECTORS are used in a series, one-pipe or two-pipe system, providing forced hot water heat

or chilled water cooling *using the same system.*

What's more, the initial cost is often less than other combination systems which lack the acknowledged advantages of "wet" heat. And because each unit is individually controlled, you can heat or cool as few or as many rooms as desired. Thus the money saved in winter will help pay for your summer cooling comfort. Clip and send in coupon below for detailed information. *trade mark



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Company

Address

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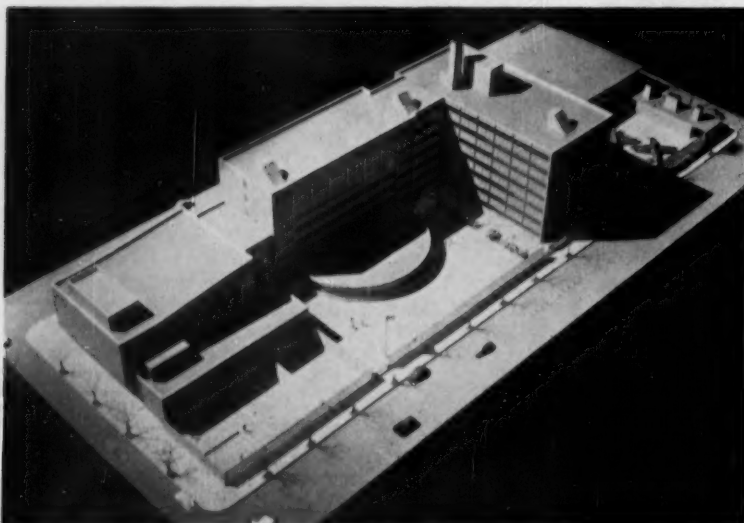
President's White House Conference Committee

Members of the President's committee for the White House Conference on Education met recently with President Eisenhower at the White House to formulate plans for the November 1955 conference. Left to right they are: Potter Stewart, U.S. Circuit Court of Appeals, Cincinnati; Msgr. William E. McManus, National Catholic Welfare Conference; Ralph J. Bunche, director, Department of Trusteeship, United Nations; Frank C. Moore, president, Government Affairs Foundation, Inc.; H. Grant Vest, Colorado state commissioner of education; Frank H. Sparks, president, Wabash College, Crawfordsville, Ind.; John S. Burke, president, B. Altman & Co.; John Cowles, president, Minneapolis Star & Tribune; Mrs. Rollin Brown, chairman, recreation commission of the state of California; Jesse O. Stratton, president, National School Boards Association; Mrs. Charles L. Williams, teacher and president,

National Congress of Colored Parents and Teachers; William S. Paley, chairman, Columbia Broadcasting System; Neil H. McElroy (chairman), president, Procter & Gamble; Finis E. Engleman (vice chairman), Connecticut state commissioner of education; Clint Pace, director, White House Conference on Education; Mrs. Oscar A. Ahlgren, past president, General Federation of Women's Clubs; James F. Redmond, superintendent of schools, New Orleans; Martha Shull, teacher, Portland, Ore.; Thomas Lazzio, UAW-CIO, Paterson, N.J.; James R. Killian Jr., president, Massachusetts Institute of Technology; Joseph C. McLain, principal, Mamaroneck High School, Mamaroneck, N.Y.; Roy E. Larsen, president and director, Time, Inc.; Lorimer D. Milton, president, Citizens Trust Company, Atlanta, Ga.; Herschel D. Newsom, master, National Grange, and W. Preston Lane Jr., former governor of Maryland.

Two-Room Movable Schools at Salina, Kan.

RIGHT: To serve as temporary schools, two-room frame cottages, such as this, were erected at Salina, Kan. They are built on a 16 inch foundation and are so constructed that they may be moved to another location if necessary. The buildings are all modern, heated with gas circulating heaters, thermostatically controlled. They have tile board ceilings, dry-wall construction, asphalt tile floors, and fluorescent lighting. The schools are 28 by 72 feet. The total cost of each building was \$15,000.



Nation's Largest Aircraft School

LEFT: This is a model of the Aviation Trade High School to be built at Long Island City, N.Y. It will be the largest school in the United States designed to train young men in the repair, maintenance and construction of aircraft engines. The \$8,465,000 building, representing the largest single school outlay undertaken by the city of New York, will replace the existing Manhattan High School of Aviation Trades, which at present occupies two old buildings on East 63d and 64th streets. Regular high school academic courses leading to college entrance will be offered.

TO INSURE GREATER COMFORT.... WITH LOWER MAINTENANCE COSTS

New Hanover High School
Gymnasium and Class Room Addition
Wilmington, North Carolina
Leslie M. Boney, architect



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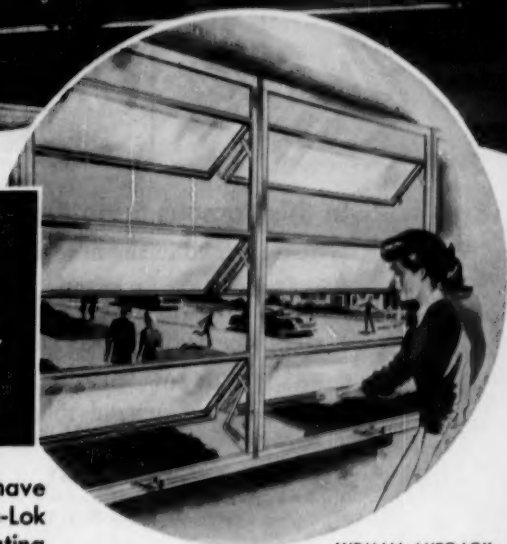


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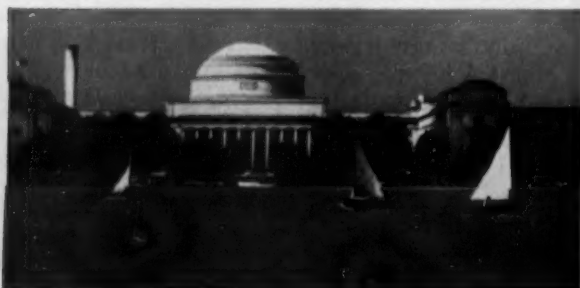


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In this Famous Scientific Institute Powers thermostatic control for heating and air conditioning systems is used in the new Dorrance Laboratory for Biology and Food Technology and in the buildings listed below.

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- CHEMICAL ENGINEERING BUILDING
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- HAYDEN MEMORIAL LIBRARY
Architects and Engineers: Vorhees, Walker, Foley and Smith
Contractor: Cleghorn Co.
- NUCLEAR SCIENCE LABORATORY
Architects: Anderson & Beckwith • Contractor: The Merrill Co., Inc.
- SWIMMING POOL BUILDING
Architects: Anderson & Beckwith
Engineers: Wolff & Munier • Contractor: H. E. Whitten Co.
- NEW AUDITORIUM, now under construction
Architects: Eero Saarinen & Associates
Associate Architects: Anderson & Beckwith
Engineer: Hyde & Bobbio • Contractor: H. E. Whitten Co.



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Douglas Aircraft Co. • E. I. DuPont de Nemours Co.
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Johns Manville Co. • Johnson & Johnson Co.
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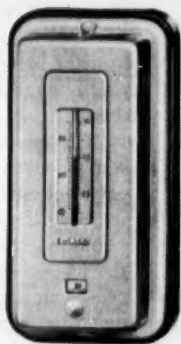
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Powers Room Type Thermostat pneumatically regulates heating and air conditioning systems. Outstanding for accuracy and dependability.

Laboratory with an Exciting Future — From this modern laboratory with its excellent staff and research facilities will come great advances that will surpass the progress of the past and produce discoveries which will benefit us all.

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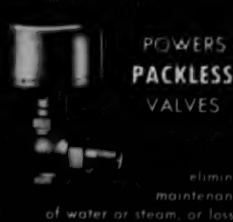
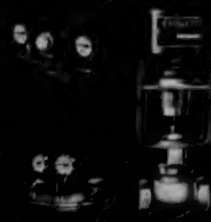
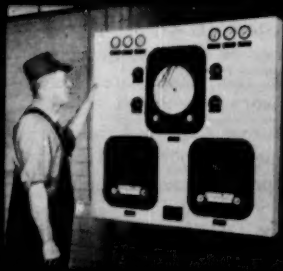
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NEWS

(Continued From Page 120)
take care of the large attendance expected at each of the conventions, and school administrators who hold reservations that will not be claimed should notify the convention or the housing bureau immediately.

"Think now, not later, about public relations, too," says the A.A.S.A. staff. Press coverage of the conventions will be taken care of if each superintendent informs his local newspapers that he plans to attend the convention and

asks them to request coverage through the international news services. A convention press bureau, directed by Belmont Farley and his staff from the press and radio division of the National Education Association, will be maintained in each of the three convention halls.

And when you get there—register early, says Dr. McClure. Beginning Sunday evening at each of the three conventions, badges will be required for admission to all meetings.

"Book Swap" Is Answer to Horror Comics Problem

YELLOW SPRINGS, OHIO. — What to do with the comic book? On the theory that the best answer to a bad book is a good book, several cities have found an answer in the "book swap." Children in these communities who are willing to give up their comic books are offered other books in exchange, reports the intellectual freedom committee of the American Library Association.

The "swaps" were generally much publicized affairs and in the towns where they were conducted brought in a considerable quantity of comics. In Canton, Ohio, some 30,000 comics were turned in at one swap; one boy brought in 815 of them and received an encyclopedia as a reward. Bookstores in Nashville, Tenn., and Roanoke, Va., exchanged Bible cartoon books for horror comics. Historical, animal or nature lore books were exchanged for comic books, which were then burned, in Vancouver, B.C.

Some communities have attempted to enact legislation which would ban the sale of comics or restrict the subject matter of those sold. Other towns have enlarged library services in order to make better reading materials more readily available to school aged children.

The comic book industry itself has responded to public criticism to the extent of establishing a code of authority to which 28 of the 31 major comic publishers have subscribed. The authority is to serve as an internal censor on the industry in order to cut down the number of horror and crime themes used in comics.

Some Agreement Reached on All Major UNESCO Issues

MONTEVIDEO, URUGUAY. — Reports from the UNESCO conference here tell of the meeting of East and West, with some agreement reached on all major issues discussed. At least, delegates reported, there was no major disagreement. "I would hesitate to be too optimistic," said Rep. Prince H. Preston (D-Ga.). "However, the attitude of the Iron Curtain delegations at this conference has been cooperative."

A resolution was approved calling on UNESCO's member states "to assure freedom of expression and to remove



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Here's a masterpiece in design . . . the MODERNAIRE group. It's one of the most skillfully designed and sturdily built examples of classroom seating that you've seen. The Modernaire brings to the modern classroom, a desk that radiates prize-winning styling . . . softly whispers deep relaxing comfort . . . invitingly encourages good posture control . . . The Modernaire is a desk of unusual structural strength and unmatched durability. It's an exceptional combination of functional beauty and superb construction . . . a combination that makes it your best buy anywhere. Get the full details on the Modernaire today.



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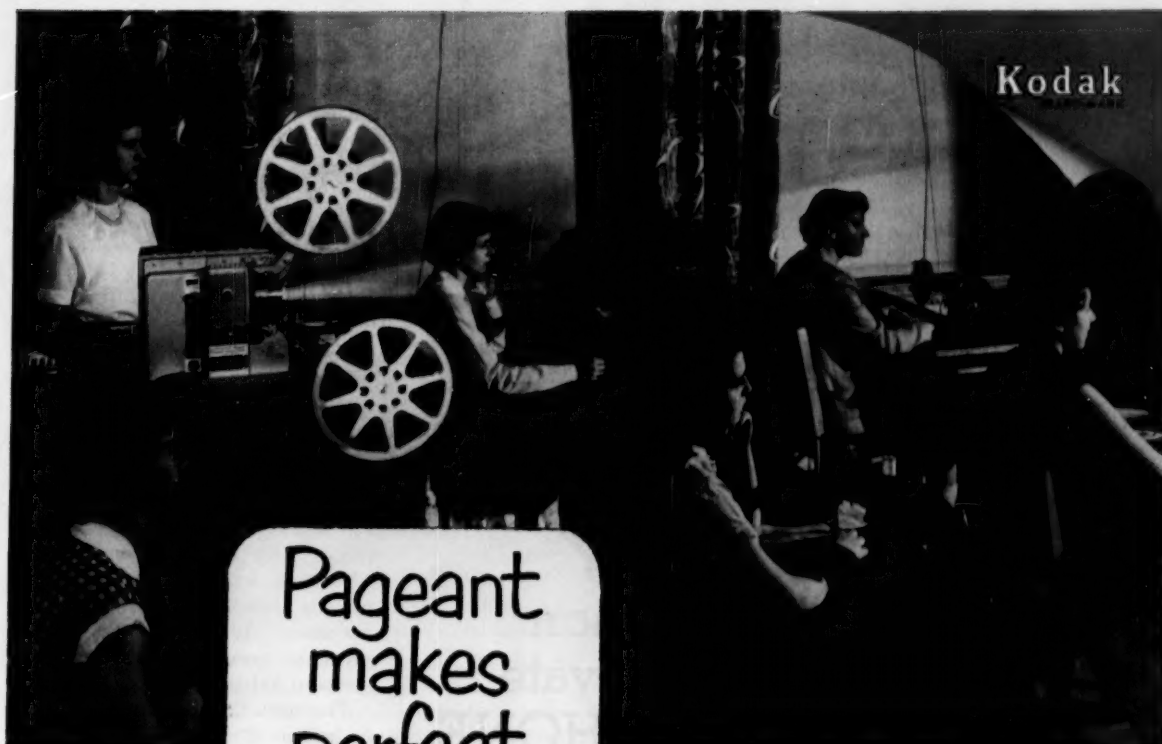


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For complete information on the new Modernaire Series Desks, see your local Rowles School Equipment Dealer, or write to E. W. A. Rowles Company, Arlington Heights, Ill.

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Pageant makes perfect

WITH MOVIES, home-economics classes can "learn by doing" faster and better because they learn by seeing and hearing first.

And *school economics* also benefit with 16mm. Kodascope Pageant Sound Projectors. For only permanently pre-lubricated Pageants by-pass the trouble spot of improper oiling, main cause of projector breakdowns and repair bills.

Besides saving you money, here are some more ways a "Pageant makes perfect" for your school.

Comfortable sound is delivered by true-rated amplifiers and matched speakers. You can focus the sound-scanning beam to get the most from *any* optical sound track by

adjusting the Pageant's built-in Fidelity Control. And the bass and treble controls on 15-watt Pageant models even help you overcome "boominess" or "deadness" in extra-large rooms.

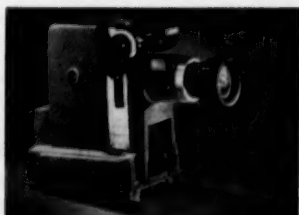
Audience attention is aided by silent, non-distracting Pageant operation. Simplified low-speed nylon gearing makes it *quiet*. And permanent pre-lubrication keeps it that way.

Clear, sharp focus in all center and corner screen areas is assured by a built-in field-sharpening element.

And Pageants are easy to set up and run. This, combined with unusually rugged construction, greatly reduces the danger of damage from inexperienced operation.

Fine projection is needed under many different conditions, and that's why there are six different Pageant models—all newly redesigned. Some give extra power and sound control for poor acoustical conditions; some give extra-bright pictures in hard-to-darken rooms. Four models provide easy, single-case portability. Prices start at \$425 (subject to change without notice).

Your Kodak Audio-Visual Dealer will be glad to demonstrate this versatile line and help you select a model tailored to your individual needs. He also has a new color catalog for you, giving full details on the new Pageant line. See him soon, or just mail us the handy coupon below.



new Kodaslide SIGNET 500 Projector, Filmstrip Model

It's completely new! And it has the smoothest, surest, fastest film-advance ever designed!

For brighter, sharper pictures, it has the Kodak Ektanon Projection Lens (f/3.5 or f/2.8), Lumenized lens-and-condenser system, and aluminized glass reflector. Shows 2 x 2 slides as well as filmstrips.

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"Central California educators have found projector lubrication unnecessary, inefficient, and time-consuming—that's why more new Pageant Sound Projectors are being sold here than any other."

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"In my book, the lifetime lubrication feature of the Kodascope Pageant puts this projector lengths ahead of the field. It's the most important improvement in sound-projector design in many a year."

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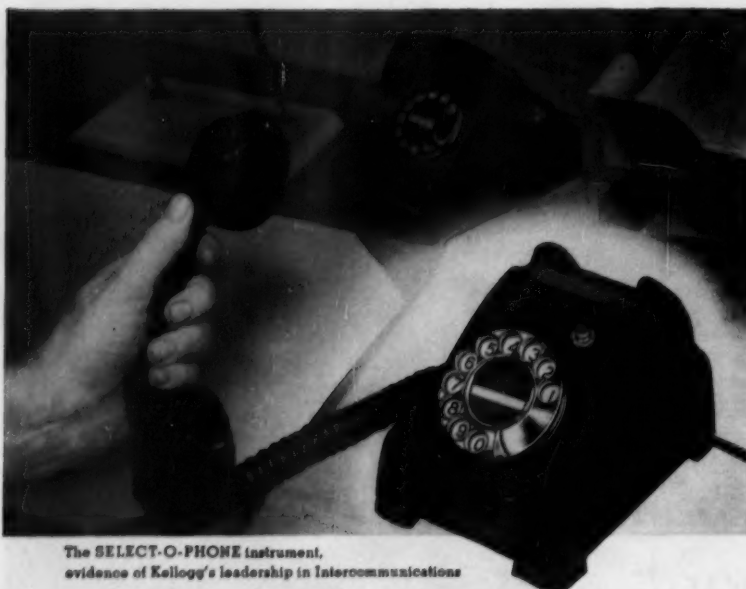
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SELECT-O-PHONE Executive Station—Dials and rings automatically at the touch of a pushbutton. No talk-listen switches to manipulate, you carry on conversations from any part of your office. Choice of solid oak, walnut or mahogany.



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NEWS

barriers for the free flow of undistorted information." This resolution had the support of the Soviet delegation and its five satellites. "If the resolution is implemented by a freer flow of information among nations, it will give us reason for considerable, if guarded, optimism," said Rep. Hugh D. Scott Jr. (R.-Pa.).

Delegates also went on record as favoring the American sponsored atoms-for-peace program, which is now in its formative stages in the United Nations General Assembly. They supported a proposal for remodeling future UNESCO programs into two categories: general activities, which are to include the collection and distribution of information, and special activities, which would limit UNESCO to a small list of short-term projects geared to the needs of member states. As a part of the 1955-56 program, greater support will be given to Palestine refugees.

The next UNESCO conference will be held in 1956 in New Delhi, India.

Enrollment in Schools, Colleges Now Totals 36 Million

WASHINGTON, D.C. — More students than ever before are enrolled in schools, reports the Census Bureau, which has totaled enrollment in schools and colleges at 36 million. This is an increase of 5,570,000 in four years. Of these students, 30 million are in public schools, 4 million in private schools, and 2.4 million in parochial schools.

Distribution by ages shows that more than 77 per cent of children 5 and 6 years old and 99.4 per cent of children from ages 7 to 13 are in school. Among high school aged youngsters enrollment diminishes: 87 per cent of the 14 to 17 year olds and 32.4 per cent of the 18 to 19 year olds are attending school.

Clinton Huff Heads Department of Rural Education

WASHINGTON, D.C. — Clinton B. Huff, professor of education at Kansas State Teachers College, Emporia, is the new president of the Department of Rural Education of the National Education Association. Mr. Huff will succeed Lucille L. Klinge, superintendent of schools, Lane County, Eugene, Ore., at the close of the department's annual meeting in St. Louis March 1.

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UNITED STATES STEEL EXPORT COMPANY, NEW YORK**

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Accept no substitute.



CYCLONE FENCE PROTECTS SCHOOL PROPERTY. When completely enclosed with strong, sturdy Cyclone Fence and Gates, the school plant and grounds are well protected. Cyclone Fence acts as a strong deterrent to even the most determined vandal or thief, keeps careless trespassers off school property.

You can buy *cheaper* fence than Cyclone, but it will *cost you more per year*. Cyclone gives full value for your dollar. Nothing but brand-new, top-quality material is used throughout. Posts and top rails are heavy and rigid. Gates won't drag. The chain link fabric is woven from heavy steel wire and galvanized *after* weaving for greatest resistance to rust and corrosion. And Cyclone is erected by full-time, Cyclone-trained experts.

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Two-lamp and four-lamp units in 4 ft. and 8 ft. lengths for standard, rapid start or slimline lamps.

Take all the people who normally have a voice in the selection of lighting fixtures. Seat 'em around a conference table, and you can quickly get them to agree on Garcy.

The reason is that Garcy, by design, looks out for everyone's interest. Architects and designers like Garcy's clean styling and impressive appearance. Lighting engineers approve the high efficiency and low surface brightness which is combined, in the Visualier pictured above, with 45° x 45° shielding.

The exclusive one-piece shielding body is a favored feature with everyone. The complete louver, together with side panels, is formed as a single metal stamping . . . for great inherent strength, no rusting of welded parts, no loosening due to vibration.

For the electrical contractor, the one-piece shielding body is a real boon. With fewer parts to unwrap, carry up ladders and assemble, it saves many installation man-hours and dollars. Maintenance people are equally enthusiastic about the one-piece shielding body. Since it embodies 80% of the fixture's reflective surfaces, cleaning is fast and thorough. The shielding body may be cleaned by merely immersing it in a drum of detergent, leaving only the surface of the chassis to be cleaned by hand.

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READER OPINION

(Continued From Page 10)

American culture. Our colleges should have the best facilities and faculties for training in all professional fields. To downgrade the cost of training in one field in order to upgrade or attempt to equalize the cost of training in other fields is unthinkable.* Probably more money could be used to good advantage for training in each of the four professional fields covered in the study.

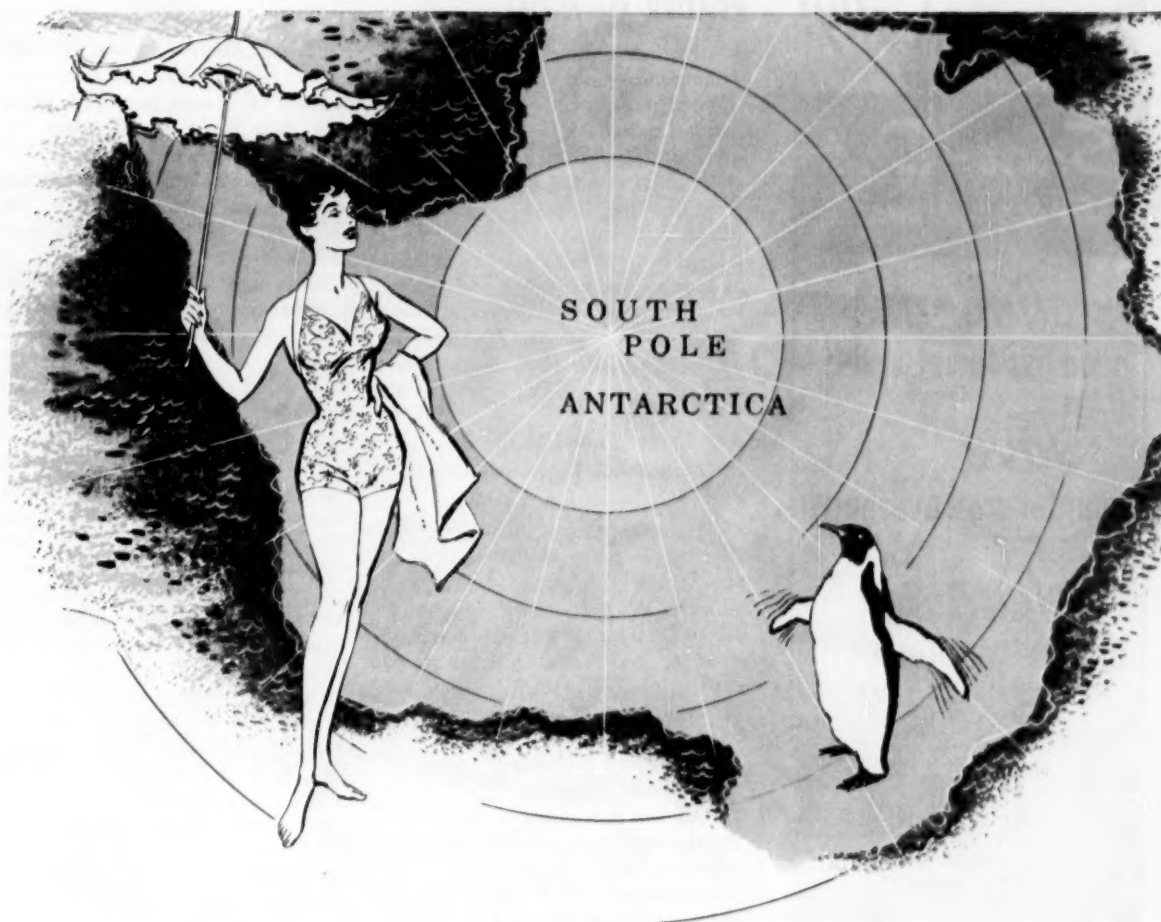
The physician today, to use the two extremes in cost for comparison, must be informed and trained in many new phases of medicine. So should a superintendent of schools. No longer is it sufficient, if it ever was, that school administrators be thoroughly versed in educational philosophy and theory. They must be good businessmen, for they administer budgets comparable to those of the largest industries in their communities. Schools are "big business," and their operation involves quantity purchases, inventory control, insurance protection, and records and information that enable the administrator to operate within the framework of state health, safety and labor legislation.

School administrators today are under pressure to provide increased plant facilities to meet the needs of mounting school enrollments. They have great influence in determining the kind of buildings to be provided by their communities to meet these growing needs, and they should be competent in the area of school planning and building. Costly monuments which taxpayers have been asked to provide in the past, upon the recommendations of administrators and architects, probably cannot be built in the future, even with federal aid. The tremendous outlay involved has been a deterrent to keeping building facilities abreast of enrollments.

Another aspect of the classroom shortage is maximum utilization of existing facilities—an area of planning in which present and oncoming administrators must be proficient.

These few examples indicate the need for broad and thorough training for school administrators. They must be proficient in all aspects of their admin-

*Editor's Note: Drs. Odell and Boortz said (p. 44): "It is not suggested that our society support less generously other professional schools. Nor is it suggested that a rigid system of equality of expenditure should be established."



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READER OPINION

istrative responsibilities, and teacher training institutions should provide the required facilities for all necessary practical training, as well as the recognized professional training. The requirements of the position should determine the cost of educating a school superintendent, not a comparison with the requirements and cost of training for a man who serves in some different category.—GEORGE H. FERN, associate director, education department, National Association of Manufacturers.

Are School Funds Spent for Nonschool Responsibilities?

Sirs:

When schoolmen assemble these days the most frequent topic of conversation centers on the finding of adequate means for financing a sound school program. Additional sources of revenue, and more revenue from existing sources, probably provide the principal focus of attention for many of us faced with the responsibility of administering educational programs for boys and girls.

It is not my intent to take even the slightest issue with the constantly expressed needs for additional funds for the construction of school facilities or the operation of existing facilities. However, there is another aspect of the problem that is also important and may not be receiving the study and attention that it deserves. The question is simple; only the answer is difficult:

Are school funds being expended within areas that are the school's, or are school monies being spent for services and activities that more properly belong within the responsibility sphere of some other agency or agencies?

To illustrate this point, I shall present several questions. The reader will undoubtedly think of many more.

Is it a responsibility of the schools to finance in whole or in part the cost of maintaining adult guards for the protection of pupils as they cross dangerous intersections? To what extent is police protection a responsibility of the schools?

To what extent is it the responsibility of the schools to finance in whole or in part medical or dental care of the pupil? Is this the responsibility of the public schools or that of the public health service or the

private practitioner? Many children become permanently handicapped as the result of wearing improperly fitted shoes. Should the schools enter the shoe fitting business?

Is it a responsibility of the schools to finance, in whole or in part, the construction of public roads and sidewalks?

When funds are insufficient for the operation of an adequate program of elementary and secondary school education, should school funds be used for adult educational and recreational programs?

In some areas it is becoming an increasingly common practice to sell pupil accident insurance policies through the schools. Because of the large volume of business and the low overhead (using teacher's time) policies can be sold through schools at an extremely low premium. Is this a justifiable expenditure of public school funds?

I am not implying that the activities listed do not belong in the area of school responsibility. On the other hand, I am not positive that all of them do belong there.

Isn't it time for a thorough study of the position of the school and its responsibility toward the child? The glib answer that the school is responsible for the "whole child" is not enough when schools face cold financial facts and discover that there is not enough money available to perform all of these functions.

It is true that we are living in a society that is far from static. Values, concepts and responsibilities are constantly changing. That we must recognize. However, the fact remains that a major portion of the schools in this country do not have sufficient funds to do properly that which they are trying to do. Isn't it time for us to determine just where our responsibilities lie? How far should the schools go?—WILLIAM SHUNCK, superintendent, Waterford Township Schools, Pontiac, Mich.

Marks of Professional Conduct in Teaching

Sirs:

What are the marks of professional conduct in teaching? Most important, I think, a professional teacher does the whole job without complaining. He does it because the job must be done and it is his duty to see that it

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READER OPINION

is done—no matter how difficult the task or what the compensation. He does it because, as a professional worker, he must serve both his clients (*i.e.* pupils and parents) and his community.

Doing the whole job, I think, has two important aspects. The first is that of accepting the difficult task and doing it without alibiing. Teachers and school administrators of all levels, from the kindergarten to the graduate school, are prone to dodge difficult responsibilities and to alibi their failures.

Part of the criticism of our public schools at the present time is just such alibiing. Some college and secondary school men have not learned to cope with the vast range of differences in ability of our total population. Neither have they learned to provide for all the needs of youth. Their curriculums and teaching methods cannot meet the modern situation, so they try to pass the blame for their ineptness to the lower grades.

Many teachers and school administrators shun the difficult job. The

professional teacher does the whole job—not just the easy job. To lead a group of bright, well prepared youngsters through any high school course is relatively simple. Unfortunately few persons can be brilliant; not everyone is well prepared; few pupils are at the same stage of ability. To teach deviates from the normal is difficult. In some schools the difficult task, differentiating instruction so as to meet individual needs, has been neglected. Consequently many pupils have not been well taught. Much of the current criticism of the public schools results from this fact.

The professional teacher accepts the task. No matter what the cause, the professional teacher, without blaming anyone, using the best techniques at his command, attempts to teach each pupil as he ought to be taught. Professional school administrators try to help teachers to do such teaching.

A second aspect of doing the whole job concerns extracurricular activities. Today most people agree that such activities are a necessary part of the school program. If we are to achieve

the "aims of education" to which we subscribe, the curriculum is not enough. Good extracurricular programs must be provided. It is as much the job of the teacher to conduct such activities as it is for him to teach formal courses.

That being so, the professional teacher must contribute to the extracurricular program without holding out for extra compensation. School officials should, of course, hire enough teachers to do all of the job without overburdening anyone and see to it that everyone is adequately paid. Teachers are obliged to let administrators know if their loads become unreasonable. No teacher should meekly accept a gross overload without protest. But any teacher who refuses an extracurricular assignment solely because he is not paid extra for it cannot qualify as a professional teacher.—LEONARD H. CLARK, *dean of instruction, Lyndon Teachers College, Lyndon Center, Vt.*

Standing Committees Usurp Administrative Functions

Sirs:

I agree with the majority point of view in your opinion poll about standing committees of the school board (*The NATION'S SCHOOLS*, January 1955, p. 65).

Standing committees are likely to usurp the functions of administration, and they generally come to believe they are experts along the lines of the committee work. They tend to perform the functions that should be the duties of the whole board. Work of standing committees is generally the work that should be performed by the superintendent and his professionally trained staff.

At this time, I have a high school board of 12 members. We are a union high school of 10 districts, each of which has one member on the board; the district in which the high school is located has three members on the board, making a total of 12 members. This is unwieldy. The rural members on the board have a tendency not to attend the meetings and consequently are uninformed on the affairs of the school. I have come to believe that no board should ever have more than five members.—HERBERT E. ALLEN, *superintendent, union high school district, Rifle, Colo.*

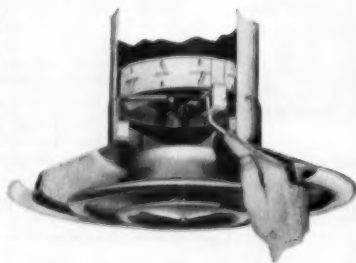


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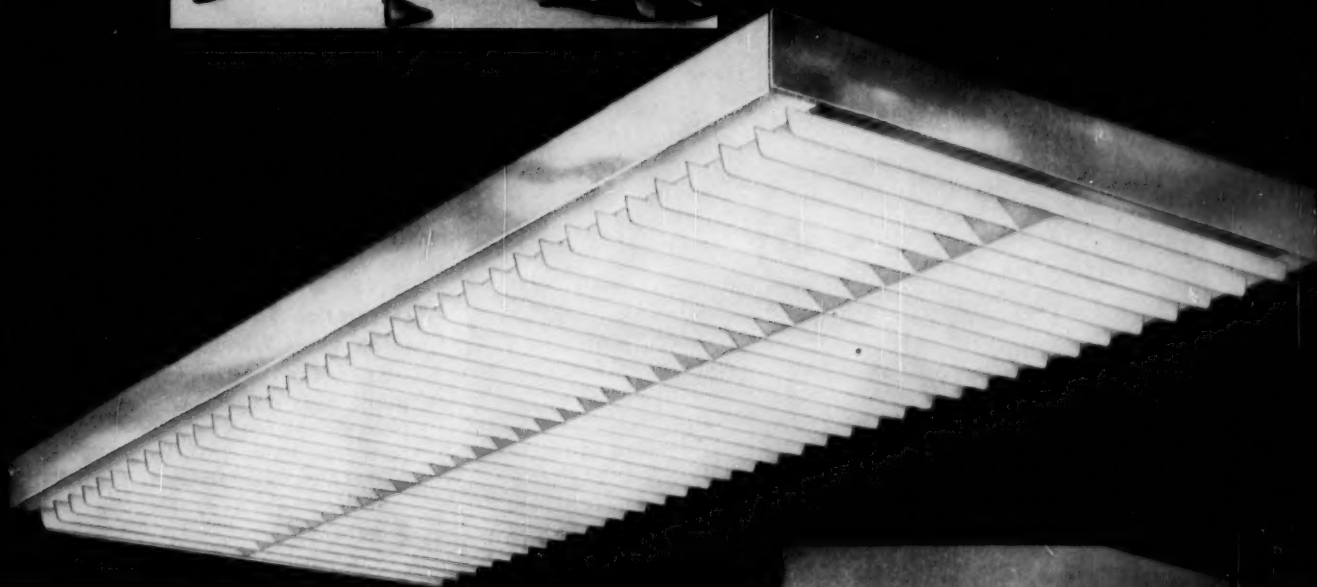
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NEWS

Georgia, Mississippi, South Carolina Move Ahead With Plans to Preserve Race Segregation Pattern

ATLANTA, GA. — Samuel Marvin Griffin, new governor of Georgia, has stated his intention of maintaining segregation of the races in the state's schools. "Both white and colored races have been living in harmony here in Georgia," he said. "We want to keep it that way." He pointed out that the state has embarked on an expansion program for schools of both

racers: \$200 million in school building and an enlarged health program.

Last year the Georgia legislature adopted a constitutional amendment that would permit conversion of public schools into private schools. The state legislature has been empowered to issue grants of state, city and county funds to individual citizens for educational purposes. Such grants

would cover tuition in the "private" schools.

Gov. Hugh White, addressing the opening session of the Mississippi state legislature, urged members to exercise restraint on legislation looking toward the abolition of public schools. He had called a special session of the legislature to meet the "urgent necessity" of financing a building program to equalize school facilities for whites and Negroes.

Speaking to the South Carolina legislature for the last time before retiring, Gov. James F. Byrnes urged legislators to enact measures that would place control of schools in the hands of local boards and would end compulsory school attendance.

A suggestion that South Carolina segregate its schools according to sex came to Governor Byrnes from Hiram Bingham, former Connecticut senator. This plan, Mr. Bingham said, would "protect adolescents from annoyance by the other race at the most dangerous period in the life of a young person, boy or girl."

In reply Mr. Byrnes noted that considerable thought has been given to this idea, which might be put into effect should the implementation of the Supreme Court decision prevent the separation of the races.

Integration Takes Place in St. Louis Without Incident

ST. LOUIS. — Integration of the public high schools here has taken place without unpleasant incident, reports Supt. Philip J. Hickey. Of the 14,000 high school students, it is estimated that about 30 per cent are Negro.

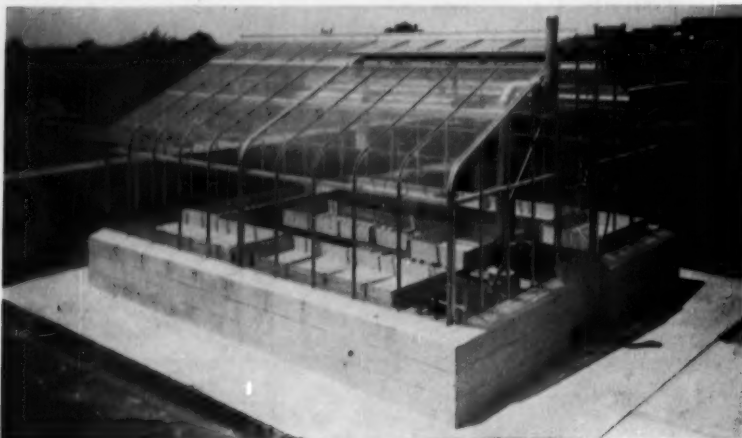
The superintendent said, "We think the new pattern has been well set. The community has indicated its willingness to cooperate in solving this problem, and we can foresee no reason for any change in this attitude."

Previous to actual integration, an intensive campaign by civic groups and church leaders had helped to acquaint the public with the situation. In high schools there were many discussions in student government groups to explain the way in which the integration program was to be put into effect. Before integration there were seven high schools for white students and two for Negro. Because of resi-

(Continued on Page 140)

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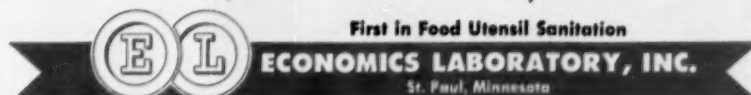
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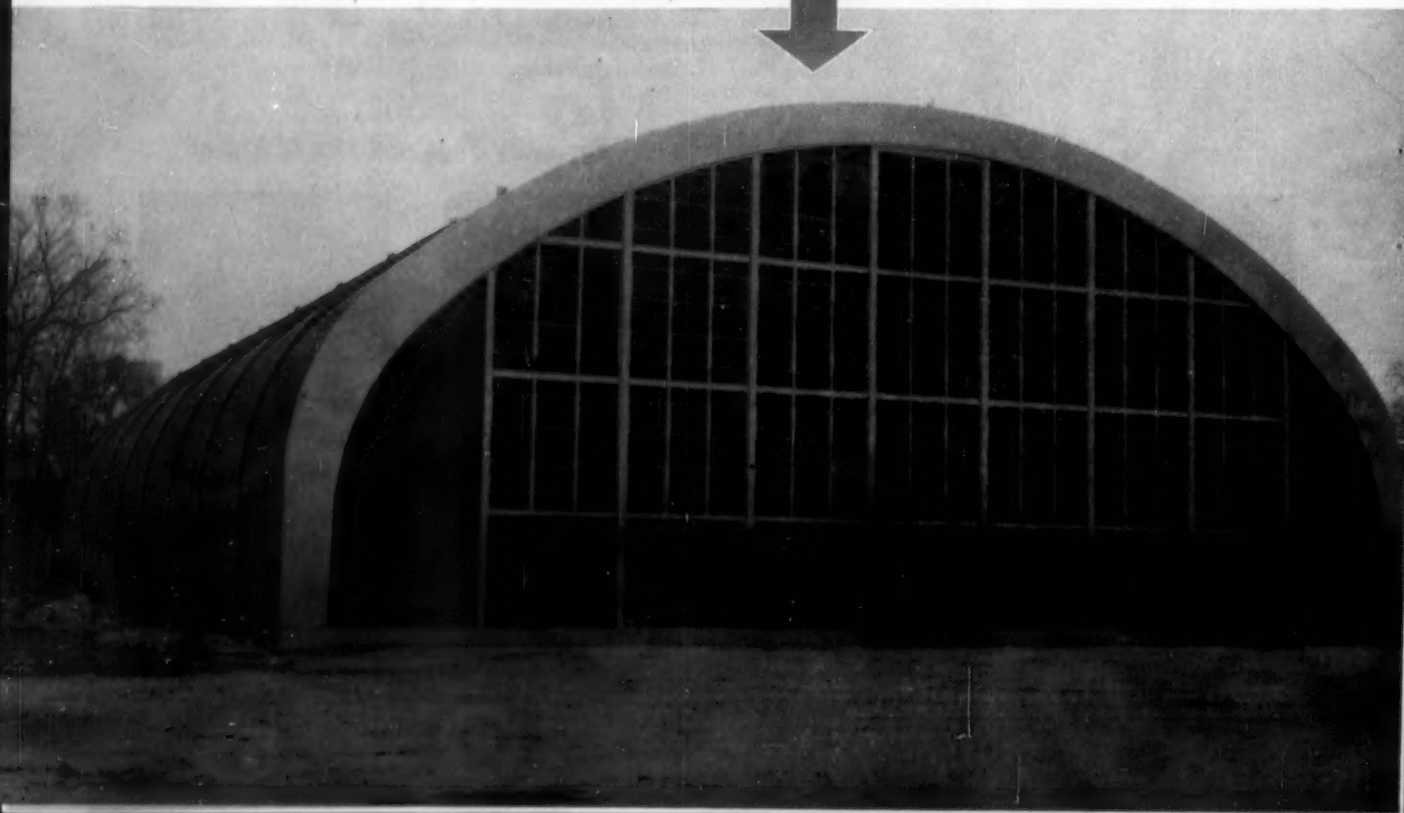
"ALL STEEL"



The Structural Steel framework during erection. The tied rigid frames were erected in three pieces, each frame requiring but two hours to set in place. The frames, structural members, and balcony deck totaled 201 tons.



The Field House in the final stages of construction. Steel roof and sidewall Z panels were shop assembled in sections measuring 6' x 18'. Each section required only 10 minutes to set in place. The Z panels were made of 16 gage black sheets, and totaled 101 tons.



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THE NEW FIELD HOUSE at Allegheny College, Meadville, Pa., is virtually an "all steel" structure, since the rigid frames . . . the roof . . . sidewalls . . . entry ways . . . windows . . . all the trim . . . and even the balcony deck are of steel.

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Structural Steel and panel designs, plus fabrication and erection were by the Pittsburgh-Des Moines Steel Company, Pittsburgh 25, Pa. The architect was Lorimer Rich and Associates, New York 9, N. Y. Consulting Engineers to the Architect were Severud-Elstad-Krueger, New York, N. Y. General Contractor was Crump, Incorporated, Pittsburgh, Pennsylvania.

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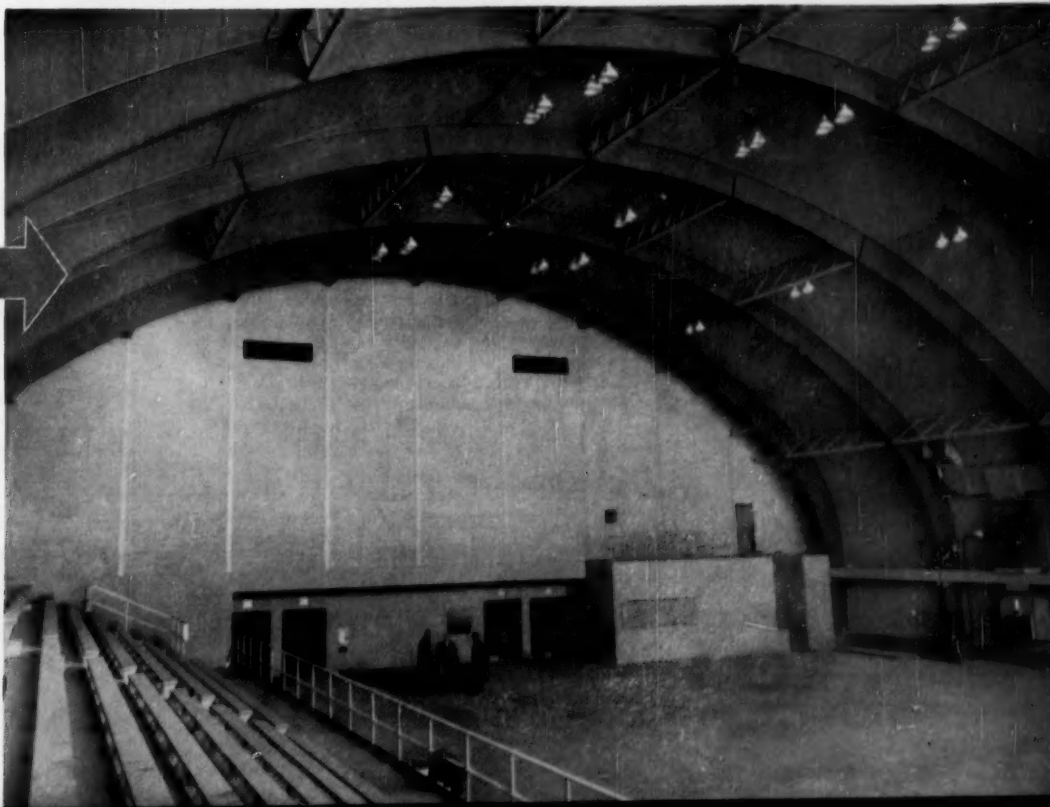
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Interior — nearing completion. The Steel deck balcony was designed and built by the Pittsburgh-Des Moines Steel Company under its patents for Steel Deck Grandstands. Opening frames, closures, and trim — all of steel — amounted to 30 tons.



NEWS

(Continued From Page 136)
dential concentration of Negroes into one or two areas of the city, few of the all-white schools have been substantially affected by the integration.

Integration of teachers is also under way. Six Negro teachers will serve at Soldan-Blewett High School and two each at Central and McKinley high schools, which were previously all white.

Teachers colleges and other special schools were integrated in the fall of

last year, and parochial schools have been integrated since 1949.

Mrs. Remmlein Named President of School Law Organization

DURHAM, N.C. — Officers have been elected for the National Organization on Legal Problems of Education, which was recently set up to make school law better known and understood by school administrators. President is Madaline Kinter Remmlein, assistant director of the research

department, National Education Association, who has served as temporary chairman; secretary-treasurer is Lee O. Garber, associate professor of education, University of Pennsylvania.

Members of the executive committee include: E. C. Bolmeier, department of education, Duke University; Edgar Fuller, executive secretary, National Council of Chief State School Officers; R. R. Hamilton, dean, college of law, University of Wyoming, and Nolan Pulliam, superintendent at Stockton, Calif.

The organization grew out of a conference on school law at Duke University last June. Membership is open to school administrators, state education department representatives, school board members and attorneys, professors of law and education, and anyone else interested in school law.

Elected Officers of A.A.S.A.



Two of the new officers of the A.A.S.A. who will take office March 15 are Omer Carmichael (left), superintendent at Louisville, Ky., vice president of the association, and Martin W. Essex, superintendent at Lakewood, Ohio, who will serve on the four-member executive committee until 1959. Election of Mr. Carmichael and Mr. Essex was announced in the February issue of *The Nation's Schools* at the same time the announcement was made of the election of Paul J. Misner, superintendent at Glencoe, Ill., as president-elect of the association.

Arizona Teachers Vote in Favor of Social Security

PHOENIX, ARIZ. — Teachers in Arizona voted by a large majority to place themselves under federal coverage for Old-Age and Survivors Insurance and the Arizona Public Employees' Retirement System.

Reports attribute the teachers' decisive vote to the interest shown in the problem by the Arizona Teachers' Retirement System, the state legislature and its departments, and the state education association. Previous to

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Each Table seats 24 students on Benches that are built with the tough plastic laminate that means long service. Each Table sets up in only 15 seconds, by one man, in one simple operation. This fast conversion time enables you to keep valuable floor space busy right through the day.

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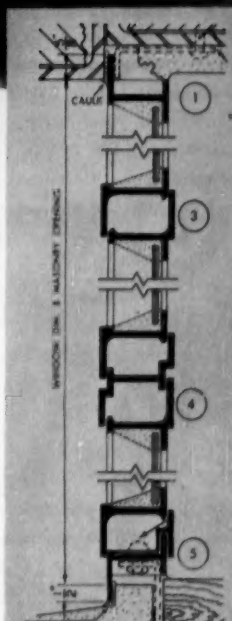

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The free, open, uncrowded look . . . plenty of light and air . . . beautiful windows that serve as walls, yet cost less. VAMPCO ALUMINUM INTERMEDIATE PROJECTED WINDOWS are the keynote to the "functional look" in the design of the Washington Elementary School, at Waupun, Wisconsin. Architects and contractors are learning to build with VAMPCO for strength, beauty, durability and above all FLEXIBILITY. Find out how VAMPCO's special designing service can help solve your unusual building problems . . . WRITE TODAY!

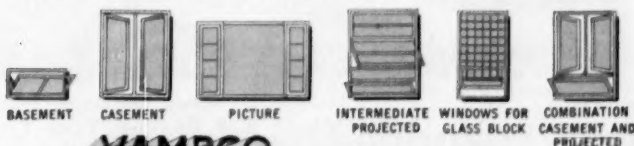


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PLAINWELL, MICHIGAN

SUBSIDIARY OF MUELLER BRASS CO., PORT HURON, MICHIGAN

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- ☐ Please send catalog of Aluminum Windows For Light Construction.

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NEWS

voting, visits and conferences were held in many individual communities to acquaint teacher groups with the facts of the proposed program.

TV Audience Gives \$628,484 to Negro School in Mississippi

HOLLYWOOD, CALIF. — Piney Woods College in Mississippi has been given \$628,484 by television viewers. A few weeks ago the head of the college, Lawrence C. Jones, was the central figure on Ralph Edwards'

NBC-TV show "This is Your Life." Mr. Edwards appealed for "a dollar each" from the viewers, and the money rolled in.

The story of Dr. Jones is the story of a struggle to establish and maintain a school for Negroes in Mississippi. Located a few miles south of Jackson, Piney Woods school began in 1909, when Dr. Jones used a pine tree log as a desk and had as his pupils a few youngsters in the surrounding neighborhood, eager to

learn to read and write. Now the school covers 16,000 acres and has 500 students.

At the close of the television show, which came as a complete surprise to Dr. Jones, Mr. Edwards asked viewers to contribute to a permanent fund which would continue to give educational opportunities to Negro students in the years to come. The money arrived in huge mail sacks, about \$3500 per sack. Four days after the television program, 60 sacks of money had been received. Special arrangements had to be made by the Piney Woods post office and the bank at Jackson to take care of the avalanche of contributions.

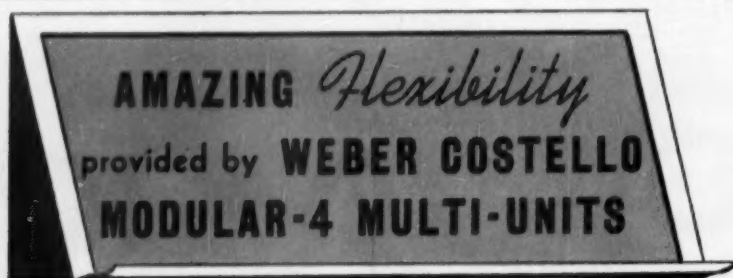
Some of his former students who appeared on the show told how Dr. Jones arranged for them to go to his college, despite their lack of funds.



Lawrence C. Jones

They came to school with a sack of potatoes or a few cents and he accepted them as boarding students. In the early days, they worked one day and went to school the next, erecting buildings on the campus as they learned.

Among those on hand to pay tribute to Dr. Jones were E. U. Graff, Newark, Ohio, who was his high school principal; L. M. B. Morrissey, Davenport, La., a former classmate; Estella Otis Young, Meridian, Miss., a former student; George W. Dulany Jr., who gave the first girls' dormitory to Piney Woods; W. H. Mahaffery, Jackson, Miss., a member of the school board; William Yaney, Baton Rouge, La., one of the school's first students; Betty Mae Jack, superintendent, Negro schools, Scott County, Mississippi; Georgia L. Meyers, teacher at Piney Woods; R. F. McGhee, Yazoo City, Miss., and the Rev. William C. Dixon, Baptist minister of Fresno, Calif., who was one of the first students at Piney Woods.



A new concept in classroom mobility, providing units of (1) Litesite Chalkboard, (2) Peg-Displayboard to hold models, craft displays, work exhibits, and (3) Corkboard for paper display or use as an easel. Units are available in sizes 4' x 8' and 4' x 4' to provide ideal combinations to meet all changing classroom needs.



MOBILE UNITS TO SERVE CENTERS OF INTEREST

EASY TO HANG AS A PICTURE—and as easy to move to alternate hangers in other locations.



EASY ADJUSTMENT—Units adjust outward 11" at bottom to provide highly desirable inclined plane work surface . . . returned to vertical position by flick of wrist.



MAP RAIL—Chalkboard units are available with map rail at top to hold spring roller map mountings or charts.



Modular-4 Multi-Units kindle interest . . . are easy to use . . . responsive . . . design and construction based on the broadest experience in the industry.

BROCHURE BN-43 TELLS COMPLETE STORY

VISIT OUR BOOTH AT THE A. A. S. A. CONVENTION

Weber Costello Company

Manufacturers of Chalkboard • Chalk Erasers • Art Materials • Maps • Globes

CHICAGO HEIGHTS ILLINOIS

MICARTA ENHANCES FUNCTIONAL DESIGN OF BRUNSWICK SCHOOL FURNITURE

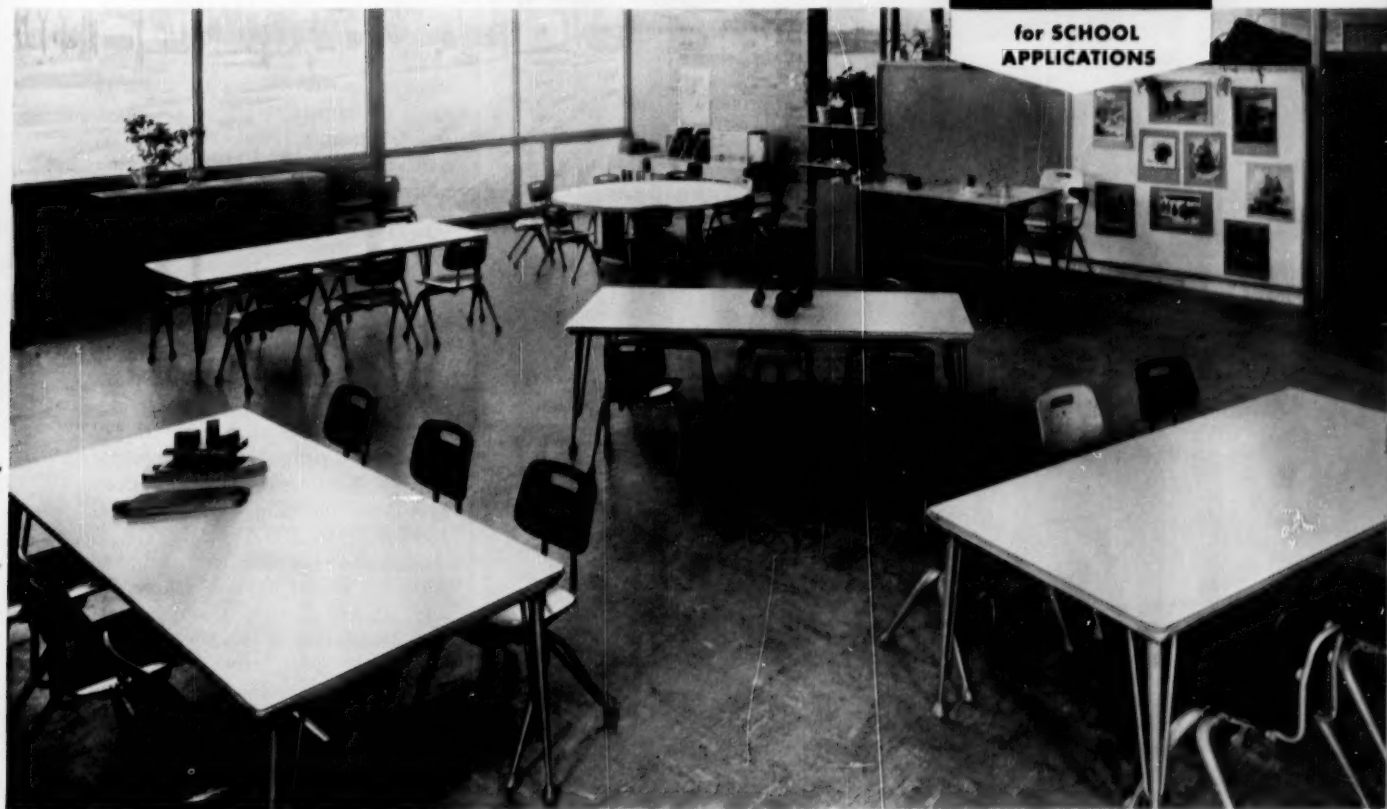
Brunswick's new line of classroom furniture is both uniquely flexible and exceptionally durable—and much of the credit goes to its MICARTA surfacing.

Brunswick specified MICARTA because this attractive, super-tough plastic makes an ideal work surface for all kinds of school activities from writing or painting to food preparation. This is because MICARTA offers amazing resistance to scuffs, scratches, stains and burns. It's a material that never needs waxing, polishing or refinishing. It cleans to a gleam with the swish of a damp cloth.

There are many applications for durably beautiful MICARTA in every school. On table tops, desk tops, counters, chairs, walls or wainscoting, its hard working properties will continually return substantial savings in upkeep costs. Look into this cost-saving opportunity today. Simply use the coupon.

J-06603

*Classroom furniture by Brunswick-Balke-Collender Company in use
at Southwest Elementary School, Evergreen Park, Illinois.*



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**Westinghouse
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largest plywood organization in the world
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United States Plywood Corporation
55 West 44th St., New York 36, N. Y.

Please send full information on MICARTA for school applications.

Name

Address

City Zone State

NS-9-58

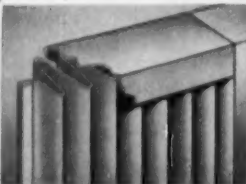


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MORE
WHEN YOU CHOOSE

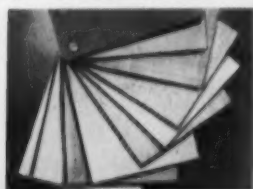


MORE Construction Features — FOLDOOR Multi-V design permits less stacking space, eliminates annoying "air bellows," relieves hinge strain, gives silent trouble-free operation.

MORE "Plus" Features — FOLDOOR offers an attractive cornice at no extra cost, and the only truly concealed track. A narrower profile that fits within the door frame takes up less space as a room divider.



MORE Fabric Features — FOLDOOR vinyl fabrics look and feel like expensive drapery material. New soft shades blend with every color scheme, look stylish in any interior.



FOLDOOR means more savings! It puts idle space to active use, divides large areas into more usable units, creates new rooms—without expense of costly remodeling or rebuilding.

Before you buy, be sure to get a quotation from the FOLDOOR installing distributor listed in your phone book; or write

HOLCOMB & HOKE MFG. CO., INC., Dept. NS-3,
1845 Van Buren Street
Indianapolis 7, Indiana
Please send me further information on FOLDOOR.

Name _____

Address _____

City _____

State _____

NEWS

Postage Stamp Honors First Land-Grant Colleges

EAST LANSING, MICH. — A special postage stamp honoring Michigan State College and Pennsylvania State University as the first of the land-grant colleges was presented at Michi-



gan State, February 12, as a part of the college's centennial celebration.

Michigan State was created by legislative act on Feb. 12, 1855, and in Pennsylvania a farmers' high school was established in the same year. A few years later this high school became the Agricultural College of Pennsylvania. The two institutions were the first colleges to benefit from the Morrill Act (1862) which provided grants of federal lands for the establishment of colleges and for state funds to support them.

The centennial day, February 12, is coincidentally Abraham Lincoln's birthday. As President of the United States, Mr. Lincoln signed the Morrill Act.




Corporation Aid Becomes Major Source of Funds for Colleges

NEW YORK. — Corporation aid to education is becoming a major source of funds for colleges and universities as businessmen realize that "higher education is industry's best hope for talent and that industry is education's best hope for funds," reported *Time* recently.

Several corporations have instituted plans for special training, fellowships and research. Most recently, General Motors has added \$2 million in a scholarship program to the \$2.5 million education fund which it had already established. The Ford Motor Company finances about 70 scholarships a year for the sons and daughters of employees and also gives \$500 annually to each private college or university the students choose. The Gulf Mobile and Ohio Railroad has given more than \$185,000 since 1951 to private colleges along its route.

(Continued on Page 148)



Now... The Manley Snack Bar Plan makes it possible for your school to enjoy all the benefits of operating a concession stand. Extra profits from your snack bar mean extra money for athletic equipment  social functions, band equipment and uniforms  and many other extra-curricular school activities. This plan combines years of experience with the finest equipment to bring you new income  for your school. Added benefit... students not only earn money for their school, but they are learning while they are earning! Others have proved the success of the plan... now's the time to let The Manley Snack Bar Plan go to work for you!

PROFIT-PRODUCING Popcorn Machine MANLEY ARISTOCRAT

Here's a real money maker! The capacity and performance of this machine makes it easy to sell and serve those hungry crowds in a hurry. This super efficient machine has many features which make it easy to operate, such as automatic seasoning system.



PROFIT-PRODUCING Cold Drink Machine MANLEY ICE-O-BAR

Fast-selling, ice cold drinks as fast as student operators can draw them. Popular at all activities where student crowds gather. Available in three models including push-button model for exact proportioning. Serves carbonated or non-carbonated soft drinks.



PROFIT-PRODUCING Hot Dog Machine MANLEY FRANK-BANK

Be ready for those hungry student crowds with plenty of piping hot, taste-tempting hot dogs. This machine is small in size only! Big capacity... holds seven dozen buns and ten dozen hot dogs. A real money-maker!



PROFIT-PRODUCING Hamburger Grill MANLEY ELECTRIC GRIDDLE

Nothing sells like a good hamburger! Here's a real crowd pleaser as well as a profit maker. Thermostatic controls assure steady, even heat over the entire surface of the grill. Results are uniformly good every time. Big demand is no problem since this grill has a capacity of 225 hamburgers an hour.



MANLEY, INC.

1920 Wyandotte St.
Kansas City 8, Mo.

IT COSTS YOU NOTHING TO INVESTIGATE!

...and Manley has funds for sports and all equipment, school sports, and the answer to your problem is the Manley Snack Bar Plan. You'll be surprised how this plan has worked for schools for 15 years. Why don't you get the coupon so you can get a free literature packet, a Manley representative will come to your school in 15 minutes and show you the Manley Snack Bar Plan in action. There's no obligation. Why not fill the coupon now?

TEAR OFF, FILL IN AND MAIL TODAY!

MANLEY, INC.

Dept. NS-355, 1920 Wyandotte St., Kansas City 8, Mo.

- ☐ I would like to receive more information about the Manley Snack Bar Plan.
- ☐ I would like to have a representative call. I understand that there is no obligation.

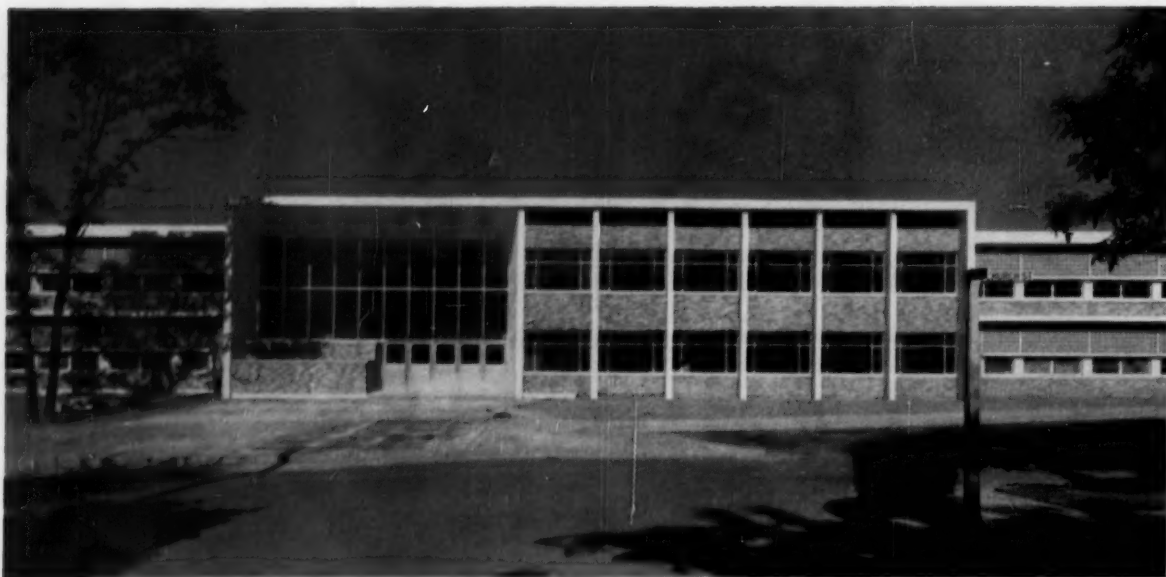
Name

Title

School

Address

City Zone State



TOMORROW'S SCHOOL ON TODAY'S

Salem, Oregon, faced with zooming high school enrollment, used modern building methods and modern equipment to achieve the lowest school-building costs possible.

Naturally, Crane plumbing fixtures were used.

Crane fixtures are exceptionally well adapted to modern school construction. They not only assure you more plumbing for your money when you build, but provide important long-term benefits as well.

For example, Crane's precision engineering and exclusive features like Dial-ese con-

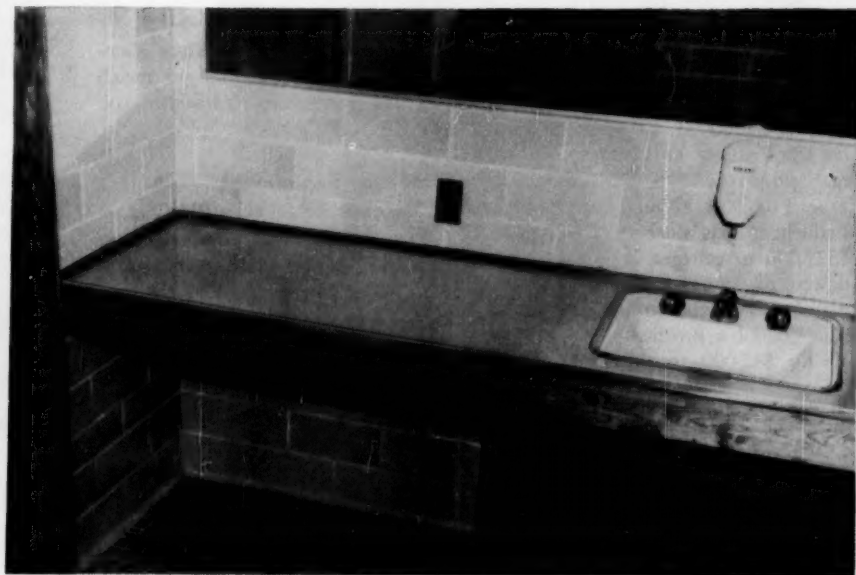
trols assure lowest possible maintenance costs down through the years. Crane vitreous china or porcelain enameled cast iron are easy to keep clean, too.

And Crane fixtures last longer, even under the most severe conditions. Their sturdy construction means generation after generation of hard use without need for replacement.

No wonder so many new schools have Crane plumbing fixtures. Ask your architect if he doesn't agree that Crane belongs in the plans for your new (or newly remodeled) school.

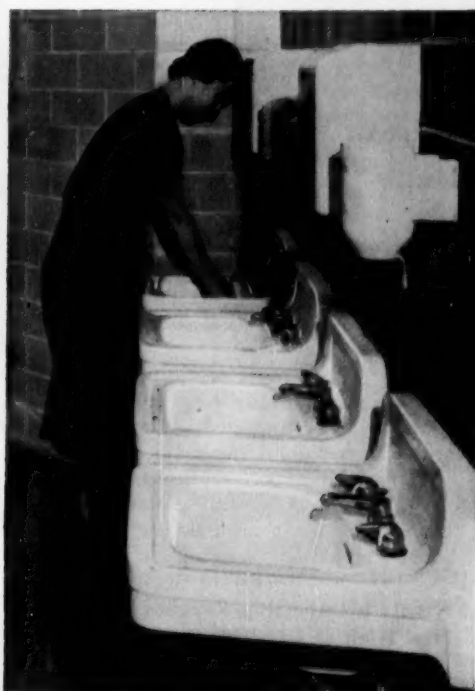
The new South Salem High School, Salem, Oregon. Architects: Freeman, Hayslip, Tuft & Hewlett.
Consulting Engineer: Thomas E. Taylor. Plumbing & Heating Contractor: Vern Collins. All of Portland, Oregon.

CRANE



Teachers' Rest Room. Features Westland lavatory with Temple Dial-ese controls, set in attractive counter-top. Dial-ese controls close with water pressure rather than against it, contain all moving parts in single replaceable cartridge for ease of servicing.

BUDGET WITH **CRANE**



◀ **Girls' Wash Room** is equipped with Crane Norwich lavatories with Embassy trim. Note high back, a necessity in school lavatory installation. Wall hung.



All water closets are Crane Santon. Due to great area covered by the school, architects wisely decided on many smaller washrooms, rather than fewer large ones.

CRANE CO.

General Offices: 836 S. Michigan Ave., Chicago 5, Ill.
VALVES • FITTINGS • PIPE • KITCHENS • PLUMBING • HEATING

**CRANE STARTS
ITS SECOND CENTURY
OF QUALITY**

Founded July 4, 1855

NEWS

(Continued From Page 144)

Other donors include DuPont, which has allotted grants of \$2500 to chemistry departments of 50 different universities and expects to give, in various ways, \$800,000 this year. The Radio Corporation of America will provide 26 scholarships of \$800 each this year. Standard Oil Company of New Jersey spread \$450,000 over 138 campuses, plus \$50,000 for the National Fund for Medical Education, last year. Union Carbide plans to

provide \$50,000 for 400 scholarships to more than 30 colleges. Standard Oil Company of Indiana gave more than \$350,000 in 1954; it matches its scholarships with equal gifts to each university. U.S. Steel last year gave \$700,000 in unrestricted gifts. Bethlehem Steel since 1953 has given \$321,000 to colleges, if privately endowed, of young employees who completed its collegiate training program. The Columbia Broadcasting System is giving \$32,000 to the alma maters

of its own selected executives. General Electric has promised to match every employee's gift to his own college up to \$1000.

Five-Year Experiment in Teacher Education Planned

PHILADELPHIA. — Five liberal arts colleges in southeastern Pennsylvania are to cooperate in a five-year experiment in teacher education. The project, supported by a grant from the Ford foundation, is centered at Temple University here. It will enable educators to make a fresh appraisal of the present requirements for teacher certification. Participating colleges are Albright, Reading; Franklin and Marshall, Lancaster; Lebanon Valley, Annville; Muhlenberg, Allentown, and Ursinus, Collegeville.

One part of the program will provide for graduates from liberal arts colleges to take full-time teaching positions at the regular salaries. Beyond their B.A. degree, their only preparation for teaching will be a six-week orientation course given at Temple University during the summer. Experienced teachers and college staff members will help the new teachers with classroom problems.

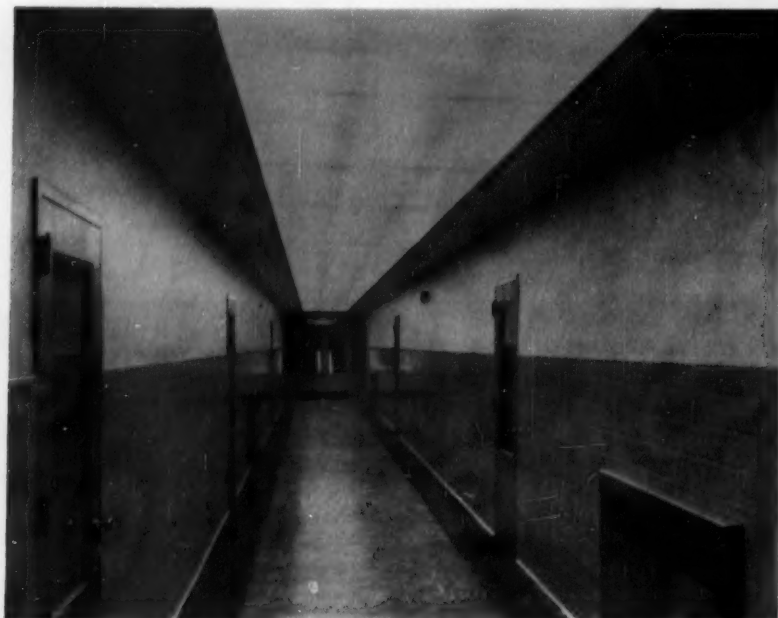
During their first three years of teaching these teachers will continue professional study leading to a master's degree and a state certificate. It is hoped that this plan will attract to the teaching profession able students in liberal arts colleges who thus far have not considered entering the teaching field.

In the second phase of the project two kinds of graduate programs for teachers will be compared and evaluated: the traditional curriculum with stress on professional courses and a new program of general education, emphasizing the humanities and the social and physical sciences.

N.E.A. Membership Reaches New High of 534,041

WASHINGTON, D.C. — Membership in the National Education Association has reached a new high of 534,041, the organization reports.

"The increase of 38,596 members [in the last year]," said William G. Carr, executive secretary of N.E.A., "is encouraging when comparisons are made with enrollment figures for previous years." The membership goal is 719,400 by May 1955.



Corridor of the new Memorial Park Elementary School in Rockland, Mass., brightly daylighted with a continuous skylight of Resolite translucent structural panels. Architect, Charles E. Cole, 2nd, A.I.A.

Resolite Translucent Panels Specified For Modern School Daylighting

Resolite fiberglass-reinforced, polyester sheets come close to being the ideal school daylighting material . . . bright, strong, safe and inexpensive.

They pass a diffused, glareless light with a high level of intensity. Shatterproof, they can't be damaged to any extent by flying objects or vandals.

Being light in weight and as workable as plywood, they are installed at half the in-place cost of conventional glazing.

Tough, their tensile and flexural strength and load bearing characteristics compare favorably with those of metal.

Resolite now produces a special self-extinguishing panel called "Fire-Snuf," for use in buildings where a flame spread rating below 75 is specified. It is molded of fiberglass and Hetron, a permanently flame-resistant resin manufactured by Hooker Electrochemical Company.

For complete information, see Sweet's or write:

RESOLITE Corporation

Box 526, Zelienople, Pa.



Problem in space division? Modernfold is the answer!

In the modern world of education, walls are expected to have a touch of "magic"...to be able to change shape, change location, or simply disappear to meet quickly and easily a variety of space requirements.

School administrators have found that MODERNFOLD doors and walls, which are used widely in business and industry, too, answer schools' needs for fast adaptability—and answer it beautifully, for MODERNFOLD is available in a variety of fabrics and a host of eye-catching colors to match any decorating scheme.

Its balanced, double-strength steel framework and its easily-washed vinyl covering, which meets the most rigid specifications in the industry, assure an almost unlimited life of efficiency and service. Models have been operated more than a million times with-

out giving any indication of trolley or track wear or frame weakness.

Switches and overhead tracks make it possible for one MODERNFOLD door to solve a variety of space-division problems with slide-rule ease and speed.

The MODERNFOLD distributor is listed under "Doors" in city classified directories. Or write New Castle Products, Inc., Dept. C54, New Castle, Indiana. In Canada: New Castle Products, Ltd., Montreal 6.


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Stuffy
classrooms
dull
alertness
and cut
"take home"
learning



A stuffy room is certainly no place to absorb real "take home" learning. That's why it's so essential to have proper temperature and ventilation control in your classrooms.

Student reactions will vary widely—depending on the time of day, the type of class, and the method of instruction. Naturally, *alert students take home more learning.*

The new Honeywell Schoolmaster Temperature Control System is a highly productive unit in modern schools today because it assures the proper conditions for classroom alertness.

This Schoolmaster System includes a newly developed school thermostat for each classroom, plus an indicator panel for the principal's office which gives a finger tip report on all room temperatures.

With it, you can accurately coordinate level temperatures, proper humidity and ventilation to create ideal conditions for brighter classes, and better learning.

The Schoolmaster is an exclusive Honeywell feature. It's designed for any school, whether it's a new or older building. No major building alterations are necessary, as the wiring is simple.

For complete information, call your local Honeywell office, or write to Honeywell, Dept. NS-3-34, Minneapolis 8, Minnesota.

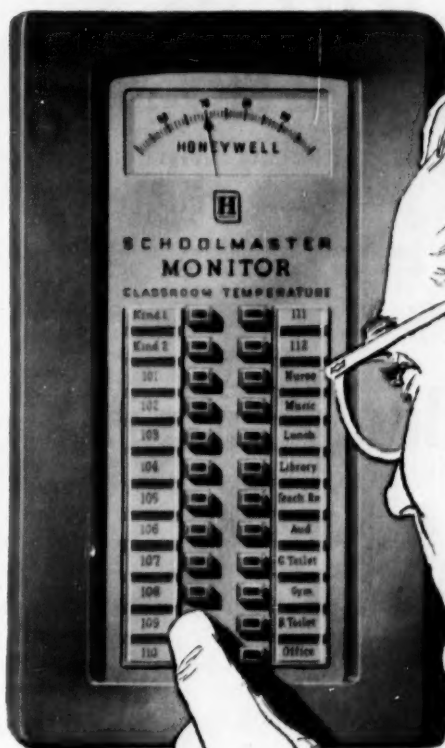
New Honeywell Schoolmaster System makes temperature and ventilation control a "productive" item



A thermostat in each room makes temperature and ventilation control a part of teaching. The Honeywell individual classroom thermostat is custom designed for the instructor so that room temperature and ventilation can be matched to class activities.

An indicator panel gives the principal a finger tip report. The panel shown here is for the principal's office and is wired to a special sensing element in the thermostat for each room. The principal can have a push-button temperature reading for any classroom.

Special sensing elements provide added fire safety. You have a constant fire sentry in the Honeywell Schoolmaster System, in addition to your regular fire protection system. You have fire sensing elements in each room, and in closets and store rooms, if you wish. These elements are wired to the principal's panel to help detect fires.



MINNEAPOLIS
Honeywell

School Temperature Controls

112 OFFICES ACROSS THE NATION

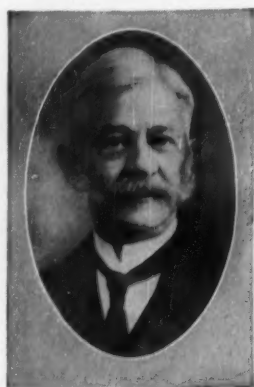


NEWS



White and Negro Teachers Groups Unite in West Virginia

CHARLESTON, W.VA. — The West Virginia Education Association and the Negro teachers group, the West Virginia State Teachers Association, were united in a single organization at solemn ceremonies during the annual state convention. Pictured at the left at the ceremonies in Charleston are (l. to r.) L. K. Lovenstein, W.V.E.A. president; Aaron Page, W.V.S.T.A. president; Phares E. Reeder, W.V.E.A. executive secretary, and Myra Fairfax, W.V.S.T.A. secretary.



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Ever increasing enrollment means an increasing Textbook Budget

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Samples on request

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SPRINGFIELD, MASSACHUSETTS

Survey Shows Health Defects of Children Often Not Remedied

NEW YORK. — Health defects among children often go unchecked into adulthood and become irremediable or require extensive remedy, reports "Rx for Healthier Children." This pamphlet is the result of a survey conducted in Pennsylvania schools by the social science research center at Pennsylvania State University.

Pennsylvania spends \$4.5 million a year on its school health programs, yet two out of every five school children had health defects that went uncorrected during a single year, states the report. The extent of the problem is demonstrated by the fact that many applicants for military service have been turned down because of long standing defects which might have been remedied in childhood.

The answer to the problem, the report asserts, is a system of school physical examinations which includes a follow-up program backed by parents, schools, doctors and dentists. Thirty states have a physical examination program now, but they are not getting their money's worth when they do not have a well ordered follow-up plan, says the report.

Fact and figures given in the "Rx" on medical and dental defects of children in Pennsylvania's public schools show that health programs differ from school to school: Some are comprehensive, others merely include eyes and throat; some are conducted conscientiously, others hurriedly. The state program provides for examination of each child every other year; however, correction of defects once they have been diagnosed lags far behind. Parents either pay no heed to the information about the bad



Chart used to teach home freezing



When will our school have a freezer?

This question is one your students are likely to ask if lectures are all they get on the subject of food freezing. The schools that are doing a complete, effective job give students experience with actual freezers. They teach not only the latest freezing methods, but about the time and money that can be saved—through safe storage of commercially frozen foods, as well as on shopping, meal preparation and serving. The need is there because six million homes now have food freezers, and the total is growing by nearly a million a year.

And students are even more enthusi-

astic if the teacher also uses the Freezer Teaching Kit, of which 30,000 sets have already been distributed for teaching use. This visual aid adds eye appeal, and home economics teachers everywhere are using this modern teaching aid.

Your teachers can give students this training easily—but, of course . . .

You need freezers to teach food freezing. Freezers are moderate in cost, and do not need special wiring. If your school doesn't have modern home freezers, your local electric light and power company, or electric appliance dealer will tell you how easy it is to obtain and install them.

If your school does not have the

FREEZER TEACHING KIT...

This FREE Kit provides visual aid for home economics teachers, to simplify freezer instruction in the classroom. It consists of 12 beautiful, full-color wall charts and Home Freezer Teaching Guide. Be sure each of your schools has a Kit. Send for it yourself and present it to the home economics teacher.

FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • BENDIX • CROSLEY
FRIGIDAIRE • GENERAL ELECTRIC
HOTPOINT • INTERNATIONAL HARVESTER
KELVINATOR • NORGE • PHILCO
QUICFPREZ • SERGER • WESTINGHOUSE



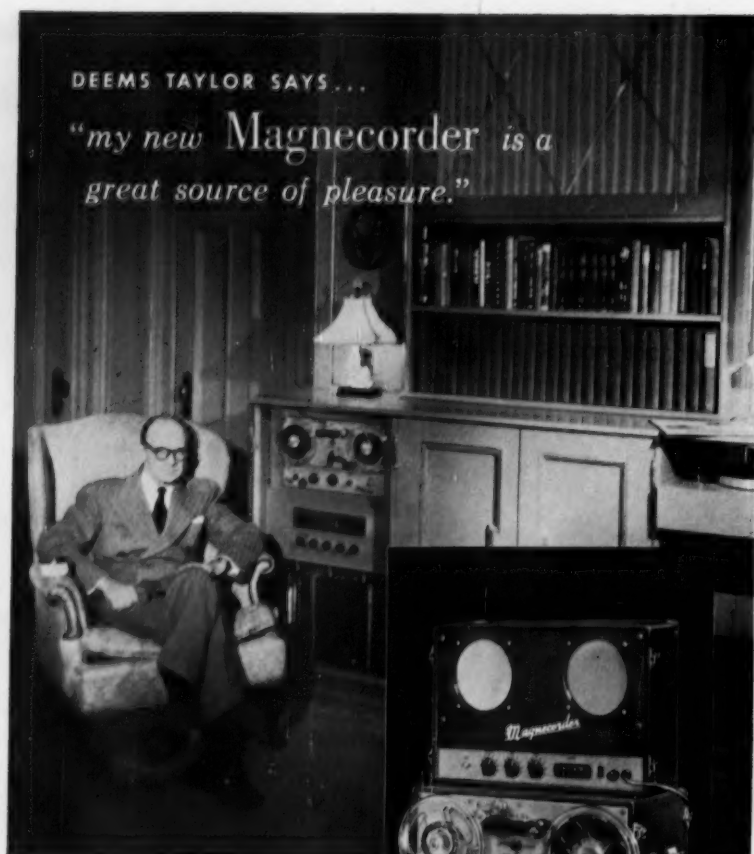
FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, Dept. NE-8-55
New York 17, N. Y.

Please send me, absolutely FREE, . . . sets of the Freezer Teaching Kit.

Your name and title,

Address

City Zone State



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"my new Magnecorder is a
great source of pleasure."

THE M-34
"educator"
\$429

other Magnecorders from \$299

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ASK YOUR MAGNE-
CORD DEALER TO
DEMONSTRATE TO
YOUR SCHOOL
GROUP. HE'S LISTED
IN THE CLASSIFIED
TELEPHONE DIREC-
TORY UNDER
"RECORDERS"

Whether you listen with the sensitive ear of the hi-fi music lover or the critical attention of the professional musician or instructor, the new Magnecorder is truly "a great source of pleasure." The finest in tape recording equipment — now at school budget price.

Auditorium programs, class work, orchestral balance, speech training—all are recorded and reproduced with the same exactness that made Magnecorders the most widely used professional tape recorders in the world.

See the new M-34 Magnecord "EDUCATOR", designed to give the finest in quality, accuracy, and versatile performance within reach of education budgets.

When you order, don't be satisfied with anything less than a Magnecorder!

magnecord, inc.
the finest name in tape recording

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NEWS

teeth, poor sight, infected tonsils, and other conditions which is given them or fail to relay the information correctly to the family physician. Follow-up for dental problems was more adequate in both city and country than follow-up for medical care. More city children received routine medical checks than did rural children. Financial status of the family seemed to have little to do with the rate of correction.

It also was found that there is a considerable degree of misunderstanding between the school doctors and nurses and private family physicians as to just how the school health program works. Once such misunderstanding has been cleared up, private doctors and dentists are willing to help.

It is the school's job to educate parents as well as children in the importance of having defects in health detected early and cared for immediately, the report concludes. If parents become personally acquainted with the health education program offered by the schools and meet the school health personnel they will realize the importance of early health care.

Teachers also should have a full understanding of the purpose and importance of the school physical examination and health program. Teachers are in a position to be the first to note the "listless" or "tired" child who may need attention.

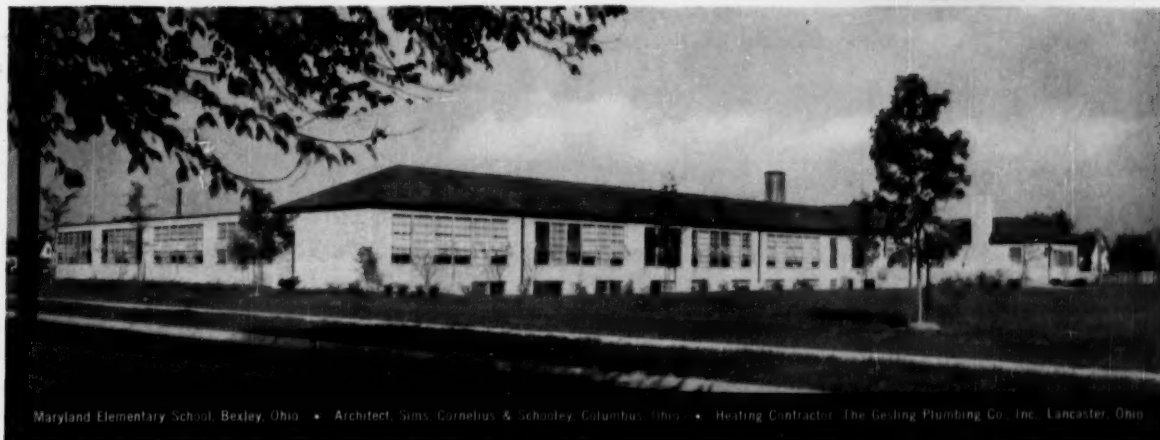
Community organizations are urged to investigate problems related to health of children in the community and to determine whether the organization could make a concrete contribution to the improvement of the program.

Educating the public to the necessity of preventive health measures would be more successful if radio and newspaper publicity were couched in more vivid language, the report points out. Public information should stress the values to the whole community of a sound school physical examination and follow-up program.

Secondary School Teachers Eligible for 200 Fellowships

WASHINGTON, D.C. — Secondary school teachers in the public schools are eligible for approximately 200 fellowships for the year 1955-56 from the Fund for the Advancement of

YOU CAN'T PUT A PRICE TAG ON THEIR FUTURE



Maryland Elementary School, Bexley, Ohio • Architect: Sims, Cornelius & Schooley, Columbus, Ohio • Heating Contractor: The Geisling Plumbing Co., Inc., Lancaster, Ohio

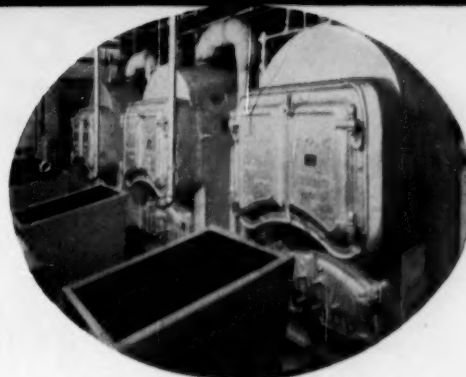
KEWANEE Reserve Plus Rated boilers certify heat to meet all conditions

One of America's greatest assets is school children . . . from their ranks come the leaders of tomorrow. Their well-being depends on adequate facilities to guard health . . . meet future needs. There can be no price tag here so thoughtful school boards and those who design, build and equip the nation's schools, plan wisely. Take the matter of heat. There must be enough boiler capacity to provide healthful temperatures. Because every Kewanee Boiler is certified to deliver 50% extra reserve power, adequate heat is always available. Kewanee Reserve Plus Rated Boilers guarantee enough power for any emergency . . . for fluctuating demands, and equally important, they provide for expansion. School enrollment is growing at the fastest tempo ever, so the need for rapid expansion is often critical.

Be sure you follow the Kewanee Reserve Plus Rating Plan in considering boilers. Know these important facts:

- 1—Boiler rating must be based on nominal capacity, not maximum capacity;
- 2—Boilers must have sufficient built-in reserve to meet changing demands;
- 3—Boilers must have sufficient capacity to operate at "cruising speed," not maximum speed at all times;
- 4—Like examples must be considered in comparing boilers. Don't be confused by vague technical claims.

Choose Kewanee and cut fuel costs—lower maintenance—reduce breakdowns—get longer boiler life.



Three 7L79 Kewanee Type "C" Boilers used in the Maryland Elementary School. Student health is protected because there's sufficient reserve to meet every need . . . provision for expansion, too.



NEWS

Education. Under this program each recipient will be able to devote a full academic year away from the classroom to activities designed to extend his own liberal education and to improve his teaching ability.

Potential contribution of the candidate to the strengthening of liberal studies in his school or school system as well as the benefits of the study to the candidate himself will determine distribution of awards. Superintendents in recommending applicants

are urged to indicate how the benefits of the fellowships may be expected to reflect upon both the individual's and the school system's program for succeeding years.

Besides individual studies, group projects also will be accepted. From two to five members of a single faculty may develop a study which will consider different aspects of the same problem.

Eligibility for a fellowship is limited to teachers who have taught

at least three years and have devoted at least half of each of the last three academic years to classroom teaching. Previous recipients of fund fellowships are not eligible to apply. Recommendations from local committees must be mailed to reach the offices of the National Committee on High School Teacher Fellowships no later than March 15.

Officers Nominated for National Congress of Parents and Teachers

CHICAGO.—Nominee for the presidency of the National Congress of Parents and Teachers is Mrs. Rollin Brown of Los Angeles, to succeed Mrs. Newton P. Leonard. If elected, Mrs. Brown, now the first vice president, will serve three years. The election will be held at the congress' 59th annual convention in Chicago May 23 to 25.

Other nominations include: first vice president, Mrs. James C. Parker of Grand Rapids, Mich., at present chairman of the national committee on congress publications; treasurer, James H. Snowden of Wilmington, Del., president of the Delaware Congress of Parents and Teachers, and secretary, Mrs. L. W. Alston of Hattiesburg, Miss., chairman of the national committee on high school service.

Special Classes for "Problem Students" Proposed

SAN FRANCISCO. — Special classes for "problem students" have been proposed here by Supt. Herbert C. Clish as a partial answer to the problem of juvenile delinquency.

Two trial classes would be set up in junior and senior high schools. Their curriculum would include four hours a day for academic subjects and two periods a day for individual counseling. Classes would not exceed 15 students and the same pupils would not necessarily be in every class. If a student became a problem in his history class but was well behaved in other classes he would join the special students only during their history period. The work of the teachers would be supplemented by a psychiatric social worker.

Teachers would recommend students for the special classes, but the final determination would rest with the counseling and attendance office and the superintendent.



Reduced towel costs \$300 per year ... yet improved quality of service

A Pennsylvania school system with an enrollment of 4,000 pupils switched to MOSINEE Turn-Towel service and showed a saving of \$300 in the cost of towel service in one year.

The drying capacity of Mosinee Turn-Towels improved the *quality* of service, and the "Controlled-Type" Turn-Towel dispenser provided the cut in towel consumption to produce these savings.

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ALL NEW IN THE REAR . . .
with wrap-around,
safety-vision windows.

Can you conscientiously "buy on price" alone, with the lives and whole-limbed safety of your school's children at stake? Isn't it wiser . . . in the long run . . . to buy top quality?

Every BLUE BIRD School Bus is an example of BLUE BIRD'S uncompromising adherence to top quality construction . . . *and the added safety it brings to you.* The new, 1955 BLUE BIRDS are the finest School Buses ever built. Their new, more abundant safety features give them the leadership in value you are looking for . . . from both the standpoint of child safety and economical operation.

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Please send me your new, 1955
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WASTED FUEL DOLLARS SAVED BY HERMAN NELSON DRAFT|STOP SYSTEM GIVE YOU CLASSROOM COMFORT "FOR FREE".

IF you're depending on open windows for classroom cooling and ventilation, you do *have money to burn!* It's the fuel dollars spent for unneeded heat—heat that is literally "tossed out the window" in an effort to bring classroom temperatures down to comfort level.

Herman Nelson DRAFT|STOP lets you keep both windows and heating costs down through balanced two-way temperature control. It heats only when heat is needed. When your "free heat" sources—sun, lights and students—take over, this system assumes the function of cooling, introducing outdoor air in sufficient quantities to maintain classroom temperature at comfort level. And, to make this fuel saving complete, the Herman Nelson method of draft elimination functions without using costly heat.

Comfort and cash savings—let Herman Nelson prove how easy it is to have both. For complete information, see our catalog in Sweet's Architectural File, or write Herman Nelson Unit Ventilator Products, American Air Filter Co., Inc., Louisville 8, Ky.



NEW YORK. With today's critical classroom shortage, this room represents a perfect example of low cost modernization. Even with windows closed and curtains drawn, a Herman Nelson DRAFT|STOP Unit Ventilator keeps this Audio-Visual demonstration classroom at New York University properly cooled and ventilated. Installation includes new Light|Stop Curtain Accessory (see inset) which prevents curtain from billowing due to discharge air from unit ventilator, thereby eliminating distracting light streaks. Co-chairmen National Committee on Buildings and Equipment, Department of Audio-Visual Instruction of the N.E.A.: Dr. A. J. Foy Cross and Dr. Irene Cypher; Architects: Eggers and Higgins.



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SCHOOL PRODUCTS



SOUTH DAKOTA. Large glass areas help insure bright, cheerful classrooms—but cooling, heating and ventilating functions at Lincoln Grade School, Yankton, S. D., are assigned to dependable, efficient Herman Nelson DRAFTSTOP Unit Ventilators. Superintendent of Schools: L. H. Baumann; Architects: Hugill, Blatherwick & Fritz; Engineers: G. M. Orr Engineering Co.; Mechanical Contractor: Freeman Corporation.

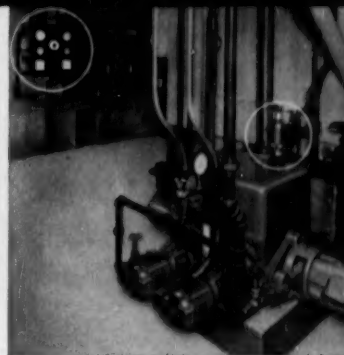
ILLINOIS. Helps them to concentrate in comfort. No chilling drafts—no interruptions from opening and closing windows. Herman Nelson Unit Ventilators meet classroom cooling, heating and ventilating requirements every season of the year at Solomon School, Chicago, Ill. Superintendent of Schools: Benjamin Willis; Architect: John C. Christensen; Engineer: Joseph T. Fatz, Sr.; Mechanical Contractor: Dearborn Plumbing & Heating Service, Inc.



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Herman Nelson renewable AMER-glas filter combines the best features of a permanent filter with the time and money-saving advantages of a replaceable filter. Just four easy steps and the classroom filter is restored to its original efficiency.



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3. Insert the clean filter media in the frame and lower hinged top into position.



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NEWS

Public Schools' Programs for Talented Children to Be Studied

NEW YORK. — What is being done for the talented child in the public schools will be studied by the Horace Mann-Lincoln Institute of School Experimentation at Teachers College, Columbia University. A. Harry Passow of Teachers College will direct the project.

Relatively few studies have dealt specifically with how public schools can educate children believed to be

talented, Prof. Passow stated. The Teachers College program will re-examine and coordinate research already done on the subject, help school systems set up and conduct their own research for finding and developing talented children, and study the nature of talent itself.

At present, three methods are used to teach gifted youngsters: acceleration, ability groupings, and enrichment. Many public schools now use one or all of these programs. The

project will examine which of these programs will work better in a large school system and which in a small one. Special programs for gifted children need not be expensive, Prof. Passow stated, and the slight extra cost would probably be small in comparison to that for educating the mentally or physically handicapped. Such programs will be helpful for the development of many talented children who become discipline problems in the classroom because of loss of interest and boredom.

The study will attempt to find if attitudes toward different types of talent vary, whether they vary according to groups, and what effect such attitudes have in stimulating or blocking a school's efforts for the talented.

Teaching and Guidance Should Not Be Separated, Says A.S.C.D.

WASHINGTON, D.C. — Pressure from parents and from the superintendent to make all children measure up to certain norms is responsible in part for the continued separation of teaching and guidance. This indictment is made by the Association for Supervision and Curriculum Development in a booklet, "Guidance in the Curriculum." This separation of guidance from teaching in early years often results in failures and drop-outs in high school, the booklet says.

Pulling against guidance by the teacher is the false idea that all youngsters can and should measure up to a standard of achievement; this idea gains ground as the child progresses up the elementary school ladder into high school, the pamphlet says. Teachers are prevented from discovering the child's true bent or desire by having to force him to reach a standard. The achievement standard, the report points out, is intended to indicate a median point of average performance; no more than half of the children at a given level are expected to reach it. Misunderstanding and misuse of achievement tests in the last few years have accentuated the problem.

In order to mitigate the push for "standard achievement," guidance should start with instruction as soon as the youngster enters school, the report says. Teachers often overlook a variety of problems which children normally face in the process of growing up. In the early grades the rôle

Clean Dirty Floors Quickly and Easily



Mop Trucks



You can't keep mud and slush outdoors in this sloppy season, but you can get it cleaned up quickly and easily, with the right equipment.



Illustrated is the 60 gallon Model 6529 with Model 6526 rubber bumper and Model 6526 wringer.

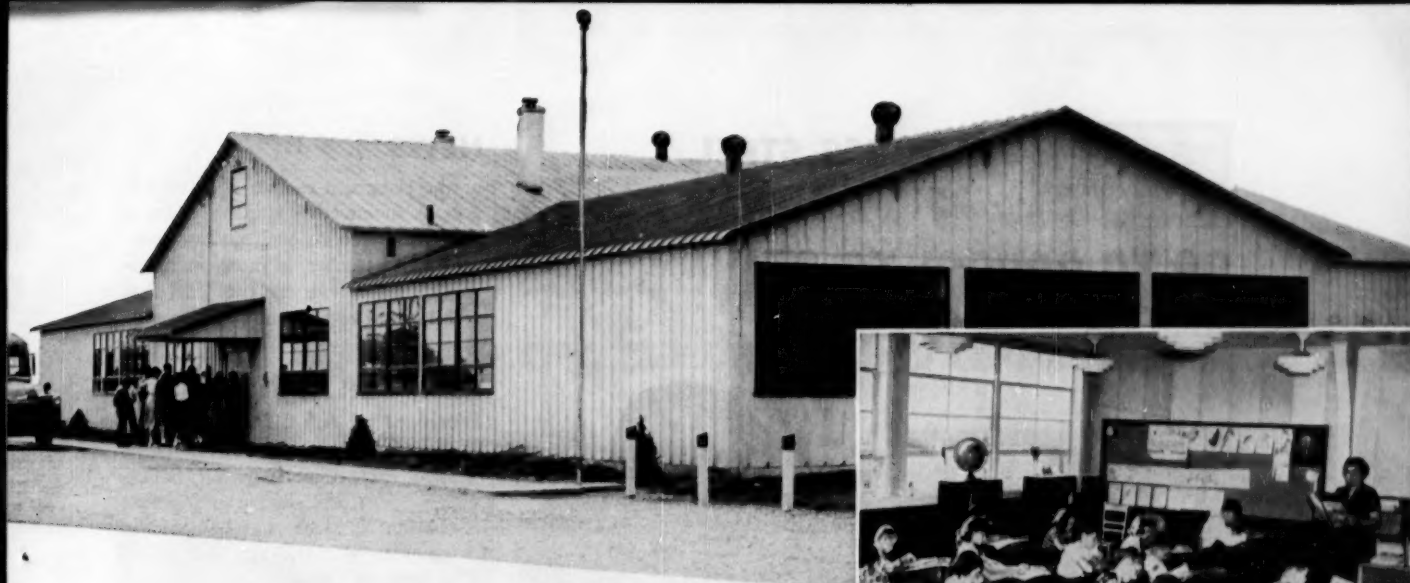
COLSON mop trucks are available with tank capacities as small as 8-1/4 gallons or as large as 60 gallons. There's a model to meet your exact cleaning requirements. Mounted on easy-rolling COLSON wheels and casters, they can be easily and rapidly moved from one cleaning area to another. All joints are welded and soldered absolutely watertight. Tank bottoms slope toward drip-proof brass drain valves. For your other requirements COLSON manufactures tray and dish trucks, laundry and linen trucks and wheels and casters for everything portable.

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Casters • Dish & Tray Trucks • Mop Trucks • Hand Trucks

"Everything on Wheels for Institutional Use"



Both pupils and teachers are proud to claim this attractive Butler building as their school. Notice the banks of windows that let in lots of fresh air, and flood the modern classrooms with light.



"With **BUTLER** buildings and plans we got both classrooms and a community center for the price of one!"

Says Alfred Totel, President, Wallace Township
School District, Ottawa, Illinois

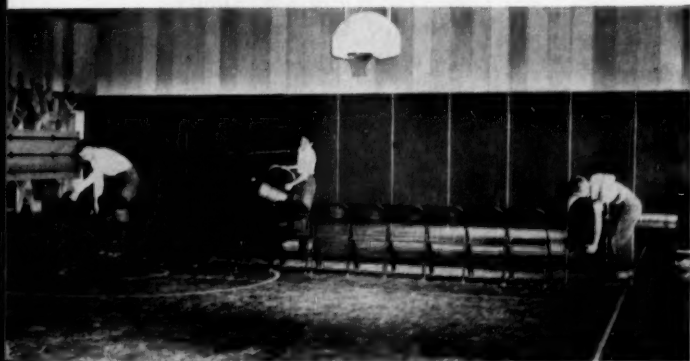
"When attendance in our one-room schools fell below legal limits, we had two alternatives: (1) We could pay high transportation and tuition costs to a city school, (2) or we could consolidate our own schools. We preferred consolidation that would also provide a community center, but the cost threatened to send taxes sky high.

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A dream comes true for Mr. Totel as he points out to Mr. Stakemiller and Mr. Phalen of the Mendota Building Service, how well their plans have worked out in practice.



There's always something going on in this big room that has become the community crossroads. It's dandy for clubs and other get-togethers—big enough for basketball games.

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Please send me the name of my nearest Butler building dealer,
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STAINLESS STEEL SINK BOWLS

GO TO SCHOOL TO STAY!



These lustrous, easy-to-clean bowls provide a good looking, permanent installation in counter tops of any material. Bowl illustrated is available with one side ledge, two side ledges, or side and back ledge—serves dual purpose of sink and drinking fountain. ELKAY Lustertone never needs replacing—saves on cleaning and maintenance—stays bright and lustrous for class after class, year after year. School boards and teachers alike will *always* be happy with a Lustertone installation.

ELKAY Lustertone SINK BOWLS come in a wide range of sizes—single, double and triple bowl models—find innumerable uses throughout the school . . . kitchens, club-rooms, laboratories, domestic science classrooms . . . are completely seamless for utmost sanitation. SINK AND TRAY combination gives advantage of large bowl for dishwashing . . . small bowl for hand washing and rinsing . . . makes a wonderful sink for kindergarten clean-up use. Modern DRINKING FOUNTAIN is another fine application of ELKAY Stainless Steel in schools.



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NEWS

of the classroom teacher is more important in effective guidance than is that of the professional guidance person. The teacher is more intimately acquainted with the problems that a child may have and is better known to the child.

Gordon Mackenzie Named President of A.S.C.D.

WASHINGTON, D.C. — New president of the Association for Supervision and Curriculum Development is Gordon N. Mackenzie, head of the department of curriculum and teaching, Teachers College, Columbia University. He will begin his one-year term at the close of the department's tenth annual convention in Chicago March 6 to 10. He will succeed Prudence Bostwick, supervisor in the Denver public schools.

Other officers elected are: vice president, Jane Franseth, specialist for rural education, U.S. Office of Education, and two new members of the executive committee, Madeline Tripp, elementary supervisor, state department of education, Raleigh, N.C., and Florence E. Beardsley, director of elementary education, state department of education, Salem, Ore.

Members-at-large have been elected to the board of directors for four-year terms. They are: Chester D. Babcock, director of curriculum and instruction, Seattle public schools; Robert S. Fleming, professor of education, University of Tennessee, Knoxville; Helen Heffernan, chief, bureau of elementary education, state department of education, Sacramento, Calif.; Lillian C. Paukner, director of curriculum, Milwaukee public schools, and Julia Weber Gordon, assistant in child and youth study, state department of education, Trenton, N.J.

Spiritual World Community Is Needed, Says President

WASHINGTON, D.C. — The frank exponent of materialism is our greatest potential enemy in the world, said President Eisenhower at a recent meeting of the Association of American Colleges.

A spiritual world community was described by the President as being the most lasting answer to world tension. As important as technical training is the development of understanding of the ethical and philosophical



PURDUE STREAMLINES MAJOR ACCOUNTING JOBS WITH BURROUGHS EQUIPMENT



A section of the Purdue University general accounting office, with three Burroughs Typewriter Accounting Machines and a Burroughs Sensimatic at work. The University uses 21 Burroughs Accounting Machines.

Purdue University, well known for its outstanding accounting efficiency, has used Burroughs equipment for over 24 years. The University's first Burroughs machine was a Typewriter Accounting Machine, purchased in 1930, and used for stores and budgetary accounting.

Today, all major accounting functions—payroll (8,000 checks a month) . . . registrations (15,000 plus yearly) . . . expenditure ledger . . . general and income ledgers . . . fund and voucher ledgers . . . budgetary accounting . . . billing . . . cost ledger . . . and the subsidiary departments' accounting work—are performed with Burroughs Accounting Machines. Burroughs micro-film equipment is used to preserve old accounting records, and to conserve valuable storage space.

All this is in addition to the extensive use Purdue makes of other Burroughs equipment,

such as Adding Machines, Receipting and Vouchering Machines, and Calculators.

For full information on how you can obtain the many advantages of Burroughs equipment for increasing accounting efficiency, just call your local Burroughs Branch office. Or, write Burroughs Corporation, Detroit 32, Michigan.



The stately Executive Building houses the general accounting office, where most of Purdue University record-keeping operations are performed.

WHEREVER THERE'S BUSINESS THERE'S

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NEWS

beliefs of other nations, President Eisenhower said. He also stressed the fact that without adequate understanding of the cultures and histories of other nations, the United States would meet only resistance if it tried to implant its own concepts of man's dignity into other areas of the world.

U.S. Agricultural Programs in Other Nations Evaluated

WASHINGTON, D.C.—The responsibilities of agriculture in the foreign

field was one of the chief topics at the conference for agricultural services in foreign areas held here last month. Delegates to the conference, which was sponsored by the Department of Agriculture and the Foreign Operations Administration, included representatives from land-grant institutions and others concerned with international technical cooperation in agriculture.

Major attention was devoted to training programs for foreign agricul-

turists. Land-grant colleges and universities have been the primary contributors to the training of some 5000 agricultural technicians, reports stated. Delegates emphasized the importance that the use of the facilities and competence of land-grant colleges has for the technical cooperation program.

Shortage of Physics Teachers Dangerous, Scientists Say

NEW YORK. — In America the physics teacher is becoming a scarce item.

Three experts in the field of scientific personnel, John R. Dunning, dean of the school of engineering, Columbia University; Maynard M. Boring, manager of technical personnel activities of General Motors Company, and M. H. Tryten, director of the office of scientific personnel of the National Research Council, report that in 1954 only 200 persons qualified to teach physics and only half of these are available for teaching.

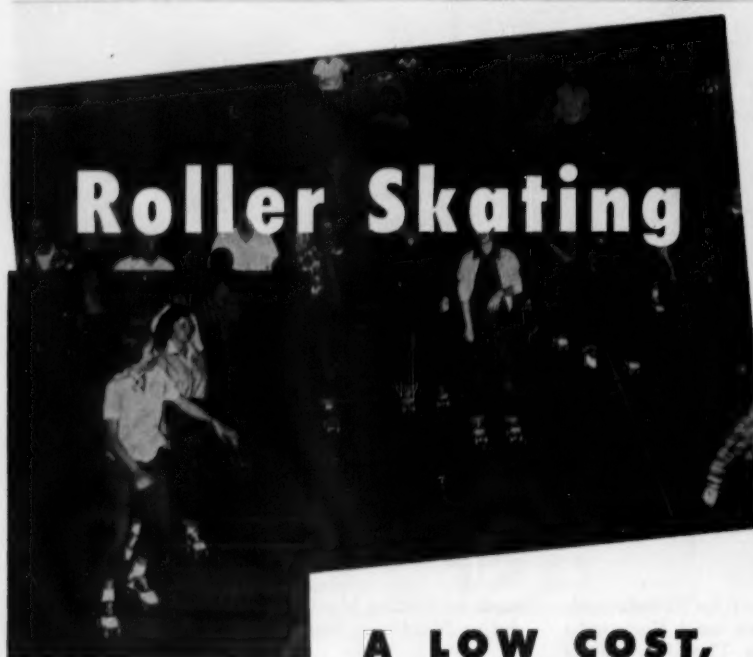
More dangerous than the small number of scientists being trained, they stated, is the practice in some high schools of dropping advanced courses in science and mathematics. On the other hand, the three scientists warned against training students too narrowly in the scientific field by scrapping the liberal arts.

Since 1950, a peak year for the graduation of engineers (50,000 graduates), the United States has slipped to a low of 20,000 graduates in the sciences. School guidance officers for several years have been under the mistaken impression that there is an oversupply of engineers and scientists, said Mr. Boring. In at least one state, he continued, there is a form letter circulated which warns guidance personnel that there is an oversupply of engineers. Such information is false, he said.

Secretary Benson Reports Increase in Milk Consumption

WASHINGTON, D.C. — Milk consumption in the public schools has increased by more than 100 per cent in some states since the establishment of the special school milk program, reports Ezra Taft Benson, Secretary of Agriculture.

In November of last year the program was operating in 44 states and in the District of Columbia, Mr. Benson said. (Continued on Page 167)



A LOW COST, CO-RECREATIONAL ACTIVITY

Gyms, hall or any large floor area make fine skating surfaces thanks to CHICAGO'S new rubber wheels which are guaranteed not to mar, scratch or damage any highly polished floor.

Many schools, churches and institutions have already found roller skating the most practical and popular recreation enjoyed by boys and girls of all ages.

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FOR USE ON ANY HIGHLY POLISHED FLOOR

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LOST KEYS
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Erase them now with **YALE** BUILT-IN **COMBINATION LOCKS**

The time to put a STOP to locker problems is when you order new lockers. Because then you can have YALE combination locks built in to save your school time, money and trouble.

So specify YALE and forget about "lost key" headaches and costly replacement. Forget about complicated, time-consuming key deposit systems.

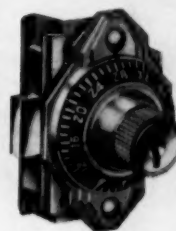
Or, if your present lockers are still serviceable, it may pay you to have YALE combination locks installed on *them*. Your YALE Representative will give you impartial, expert advice...tell you if it's practical. He may be in your neighborhood right now. Call him.

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 AUTOMATIC TYPE:**
 Locker door handle activates a sliding bolt that keeps lock in locked position. Merely closing door locks compartment.



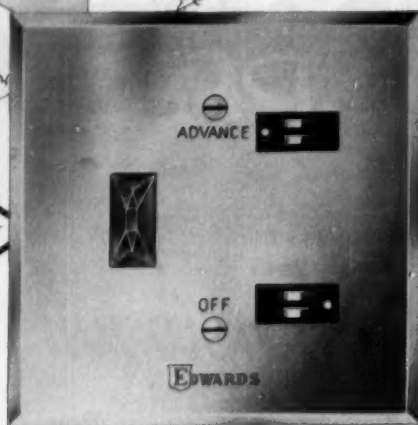
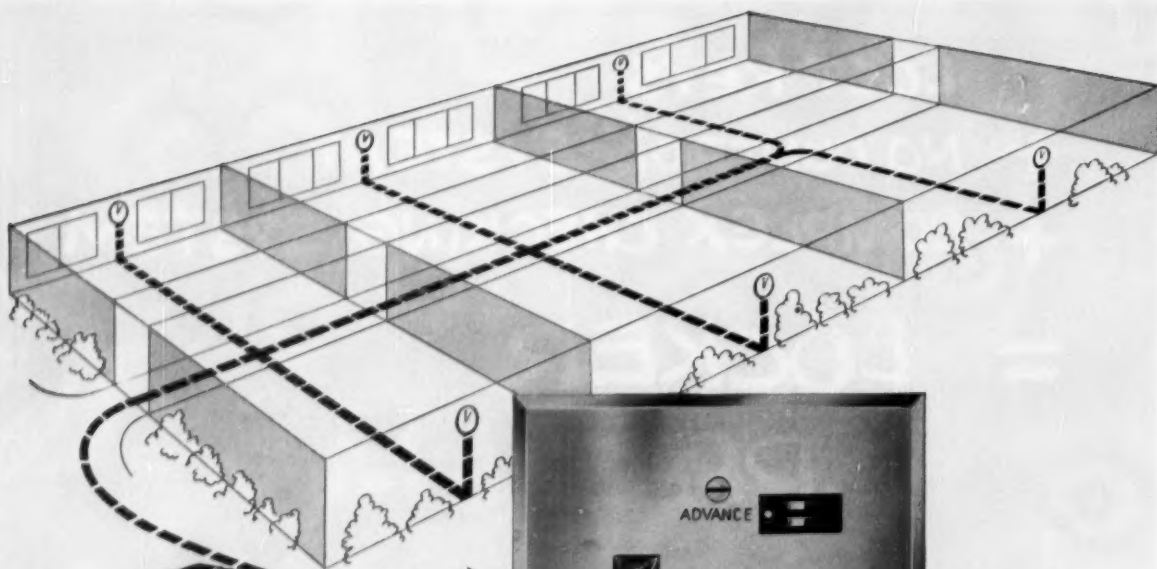
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 Door is held in unlocked position when knob is dialed past last number. A twirl of the knob locks door.



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The Edwards Synchronomatic Clock System is the simplest centrally controlled clock system on the market. And thanks to that simplicity is priced well below what you'd probably expect it to cost.

Here's how it works. A light on the panel shown above glows when power resumes after a failure. One switch sets clocks ahead . . . the other sets them back. No master clock needed, no mercury pendulums, rectifiers, condensers or radio tubes. Virtually error free, the Edwards Clock control system runs for years without attention. Write for Bulletin "CL".

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EDWARDS *Synchronomatic Clock Systems*
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NEWS

(Continued From Page 164)

son said. Reports show that children increased their previous milk consumption by about 55 per cent. State-wide increases in milk drinking in the participating schools ranged from 22 per cent in the District of Columbia to 123 per cent in Montana. Gains in most states were between 40 and 90 per cent.

By January 15 about one-fourth of the schools in the nation were approved for participation in the program. More states are taking part in the milk program than do in the national school lunch program, Mr. Benson reported. Children who do not benefit from the school lunch program are able to have milk, he said.

"Most significant to me, though," the Secretary observed, "are the substantial gains that have been achieved so soon after the start of the program. The 55 per cent increase in milk consumption during November indicates that the special school milk program provides a sound approach to increasing use of milk by school children."

American Film Assembly to Be Held April 4 to 8

NEW YORK.—The yearly American Film Assembly sponsored by the Film Council of America will be held in New York April 4 to 8.

Highlight of the meetings will be the Golden Reel Film Festival. During the two-day festival outstanding films (16mm) on subjects from 25 different areas will be shown, and juries of professional film producers will determine which is the best film in each of the categories.

National P.T.A. Congress to Dedicate Building

CHICAGO. — Dedication of the new headquarters building for the Congress of Parents and Teachers will be held at the national convention of the congress here, May 23 to 25. The headquarters building, which was completed last year, was financed by individual contributions from members and from state organizations.

TV Helps Stimulate Reading, Says Chicago Librarian

CHICAGO.—TV has not killed reading, reports Gertrude Gscheidle, head of the Chicago Public Library. Miss Gscheidle believes that TV helps

stimulate reading by interesting viewers in new fields and also by boring some so much that they turn to reading in relief.

In the last year 300,000 more books were lent than were taken out the previous year, making a total of 8.5 million books checked out from the Chicago library in 1954. Greatest in demand have been informational books. This Miss Gscheidle attributes to the increase in discussion programs and do-it-yourself shows on television.

ABOUT PEOPLE

APPOINTED . . .

Robert E. Murray, director of instruction and assistant superintendent at Schenectady, N.Y., since 1950, to superintendency there. Mr. Murray



Robert E. Murray

has been acting superintendent since the death of **Harry J. Linton**, former superintendent, in December. Mr. Murray joined the Schenectady school system in 1937 as a science teacher in one of the city's junior high schools and became an elementary principal in 1944.

Bertis E. Capehart, acting superintendent at Oak Ridge, Tenn., since last summer, to superintendent there.

C. W. Spangler, superintendent at Horicon, Wis., to supervisor of secondary schools, Wisconsin State Department of Public Instruction.

W. Herman Johnson, superintendent at South Branch Rural Agricultural School, South Branch, Mich., to superintendency at Custer, Mich.

Ivan Kissinger, former superintendent at Roseland, Neb., to superintendency at Kenesaw, Neb., succeeding **James B. Rollins**.

Maxwell E. Kuebler, supervisor of schools for the Devereux Foundation, Devon, Pa., to administrative assistant to the superintendent of Tredyffrin-Easttown joint elementary schools and the Paoli high school system, Berwyn, Pa.

Harry B. Nelson, high school principal at Dundee, Mich., to superintendency there.

(Continued on Page 168)

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NEWS

Robert Sheppard, teacher at Northwood, N.D., to superintendency there, succeeding **J. C. Sethre**, superintendent for the last 14 years, who has resigned.

Eugene G. Burnkrant, superintendent at Ashland, Wis., to superintendency at Wauwatosa, Wis., succeeding **Harley J. Powell**.

Warren B. Crandall, formerly superintendent at Freeport and Perry, Mich., to superintendency of Northwest Rural Agricultural School District, Jackson, Mich.

Herschel Roberts, principal at Fort Knox, Ky., for the last 13 years, to superintendency there, succeeding the late **William E. Kingsolver**.

T. A. Roach, superintendent at Victoria, Tex., to superintendency at Andrews, Tex., succeeding **Thomas D. Hamilton**.

Paul Fegley, superintendent at Pana, Ill., to assistant superintendency for Lakeview school district, Battle Creek, Mich.

Chris A. De Young, head of the department of education and psychology at Illinois State Normal University, to educational consultant for a self-survey of education in Pakistan. Dr. De Young, who started his teaching career in India in 1920, served as a Fulbright lecturer at the University of Delhi in 1950-51. The university has granted him a leave of absence for four months.

Earl V. Thesken, superintendent at North College Hill, Cincinnati, to director of summer school, extension and adult education at Miami University, Oxford, Ohio. His successor is **James Bryner**, formerly a professor in the University of Cincinnati's teachers college.

Paul G. Bulger, assistant provost of Teachers College, Columbia University, to provost there, succeeding **Milton C. Del Manzo**, who is on leave of absence prior to his retirement in July. Mr. Bulger will serve as acting provost until July 1. He has also been appointed secretary of the faculty.

Omar Stevens, principal of the high school, Searcy, Ark., to superintendency at Harrison, Ark., succeeding the late **R. L. Smith**.

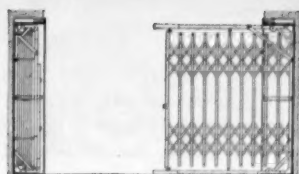
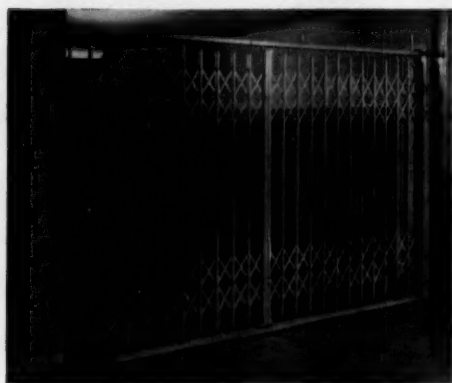
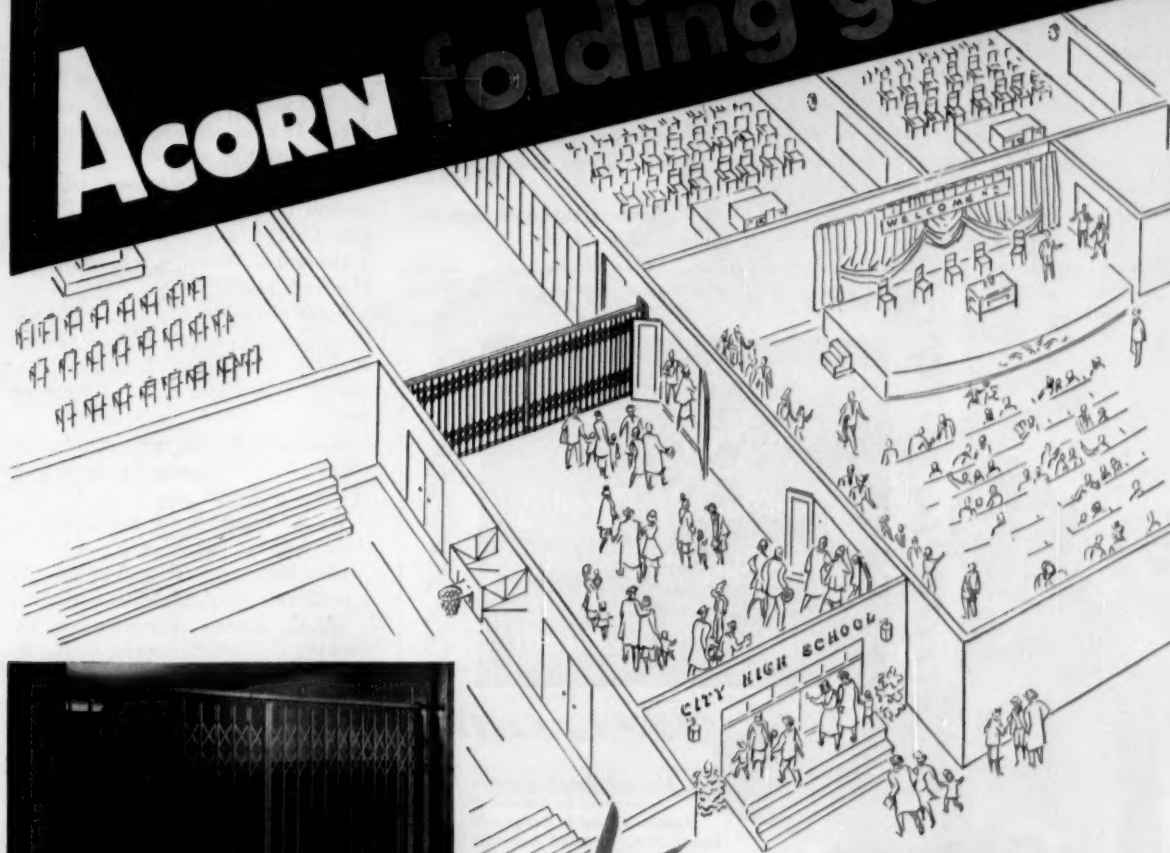
J. B. Johnson, superintendent at Carmel, Ind., for the last six years, to superintendency of the Niantic-Harrison unit school district, Niantic, Ill., succeeding **H. Frank Ebbs**.

Harold Reed, superintendent at Hebron, Neb., to superintendency for Thayer County, Hebron.

(Continued on Page 170)

Day and Night, More Schools Rely On

Acorn folding gates



(Illustrated above) Acorn "in-a-wall" folding gate unit. Diagram shows half of unit compactly folded into wall cabinet.

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PROTECT school property and equipment from casual damage or acts of vandalism after school hours.

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NEWS

Ira L. Zohner, principal of the high school at Portageville, Mo., to superintendency there, succeeding **L. G. Wilson**, who resigned.

Orvin L. Plucker, acting superintendent at Independence, Mo., since May, to superintendency there.

Earle Heckman, principal of Jefferson school, Clyde, Mo., to superintendent of the South Nodaway schools, Barnard, Mo., succeeding **W. T. Dawson**, who is resigning, effective at the end of the school year.

RESIGNED . . .

J. F. Waddell, supervisor of secondary education, Wisconsin State Department of Public Instruction.

Albert Hoffman, superintendent at Au Gres, Mich.

Richard F. Harris, superintendent at Westminster, Calif.

Arthur Andrews, president of Grand Rapids Junior College, Grand Rapids, Mich.

O. G. F. Bonnert, superintendent for Elk County, Ridgway, Pa.

Charles D. Haynes, superintendent at Hamilton, Mont., since 1933, effective at the end of the school year.

Paul E. Wiekhorst, superintendent at Dunbar, Neb., effective at the end of the school year.

L. C. Mohr, superintendent at South Haven, Mich., for the last 35 years.

Elva Jackson, superintendent for Buffalo County, Kearney, Neb.

Juanita Herrill Emmerson, superintendent for El Dorado County, Placer-ville, Calif.

Howard C. Walter, superintendent at Hartford, Mich.

Elmer H. Wilds, director of the graduate division and of the summer session at Western Michigan College of Education, Kalamazoo, after 33 years of service.

Francis W. Brown, superintendent at Ottawa Hills, Ohio, effective at the end of the school year.

W. R. Wimbish, superintendent at Arlington, Tex., effective July 1.

John Makel, superintendent for Otsego County, Gaylord, Mich.

W. C. Bloom, superintendent for Dawson County, Lexington, Neb., for the last 40 years.

Lawrence J. Linck, executive director of the National Society for Crippled Children and Adults, Chicago.

C. R. Kosebud, superintendent at Rolla, N.D.

William C. Bloom, superintendent for Dawson County, Lexington, Neb.

J. L. Campbell, superintendent at Carthage, Mo., effective June 30.

J. H. Peet, superintendent at Cedar Falls, Iowa, for the last 20 years.

N. Earl Walker, superintendent at El Dorado Springs, Mo., for the last five years.

DIED . . .

Nan S. Creaghe, superintendent for Powers County, Lamar, Colo.

Joseph Crudup Kittrell, 82, former superintendent for Vance County, Henderson, N.C.

The Right Rev. Joseph V. S. McClancy, 72, superintendent of the Roman Catholic Diocese of Brooklyn, N.Y. Msgr. McClancy was a vice president of the National Catholic Educational Association and a member of the New York State Council of Catholic School Superintendents.

Arthur E. Chase, 90, former superintendent at Fort Lee, N.J.

Onsville J. Moulton, superintendent at Neptune, N.J., since 1928.



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THE BOOKSHELF

Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

The Role of the Administrator in the Analysis and Improvement of Instruction. Prepared by the Southwestern Cooperative Program in Educational Administration. Report of a conference for administrators. Various aspects of the inservice education of local administrators were considered: understanding good teaching, organizing for instruction, assisting teachers and pro-

viding leadership, curriculum building, and evaluation of instruction. The Southwestern Cooperative Program in Educational Administration, University of Texas, Austin 12.

The Teacher Looks at Supervision. 1954 Yearbook of the New Jersey Secondary School Teachers' Association. Pp. 79.

An Integrated Program of State-Level Services to the Public Schools. South-

western Cooperative Program in Educational Administration, Box 1666, University Station, Austin, Tex.

Administering a Sick-Leave Program for School Personnel. Prepared by the American Association of School Administrators. Describe sick-leave benefits for boards of education and teacher groups that want to know how to establish such programs in their schools. Emphasizing that no standard program can be adapted to all situations, the pamphlet describes different types of programs that provide for allowable days of compensation and for unlimited days. The terms of such programs are set out, such as absence without pay, allowance for length of service, cumulative leave. Also the probable costs for compensation and for substitute teachers are described and the importance of obtaining adequate funds is pointed out. Questions of special interest to boards of education are brought up and answers are suggested. American Association of School Administrators, 1201 16th St., N.W., Washington, D.C. 50 cents.

ADULT EDUCATION

Financing Adult Education in America's Public Schools and Community Councils. Complete report by Edward B. Olds, research coordinator of the National Commission on Adult Education finance. Adult Education Association of the U.S.A., 1201 16th St., N.W. Washington D.C. \$1.25.

AUDIO-VISUAL INSTRUCTION

Teaching With a Filmstrip. By Margaret Divizia, supervisor, audio-visual section, curriculum division, Los Angeles city schools. Society for Visual Education, Inc., Chicago 14.

COMMUNITY RELATIONS

How to Plan Your Community Resources Workshop. By Albert L. Ayars. The Educational Publishing Corp., Darien, Conn. 75 cents.

School-Community Planning. Solving immediate problems. Report of the third workshop for Delaware schools, Dover, edited by Matthew J. Pillard, executive secretary of the Delaware School Council, and Babette B. Urice, assistant. Workshop members report on ways in which school-community relations can be improved so that both school and community may

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Above: Close-up of the conversion table in millimeters, millibars and inches.

Left: Cenco Mercurial Barometer with white lacquered metal mounting.

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No. 76891 Cenco Mercurial Barometer, same as No. 76890 but for altitudes from 1500 up to 10,000 feet. Scale ranges from 500 to 700 mm and 19.5 to 27.5 inches. Each	\$56.50
Vin. 76892 Barometer Mounting made of sheet metal for safe and convenient mounting of Cenco barometers. Finished in white lacquer to provide a light background for adjusting the zero index and vernier. With conversion table. Length, 37 1/2 inches, width 3 1/2 inches. Each . . .	\$6.75



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participate in the solution of school problems. Delaware School Study Council, University of Delaware.

CURRICULUM

Developing Programs for Young Adolescents. Prepared for the Association for Supervision and Curriculum Development by the Department of Supervision and Curriculum Development of the Florida Education Association. Divided into four parts, the

pamphlet deals with ways in which teachers may translate the needs of junior high school children into educational programs, describes the programs which some junior high schools have instituted, and offers specific suggestions in functional organization of the program and in the improvement of facilities and teaching methods. The booklet closes with suggestions for training of teachers in order to develop a more satisfactory type of program.

Association for Supervision and Curriculum Development, National Education Association, 1201 16th St., N.W., Washington 6, D.C. \$1.

Practical Programs for Moral and Spiritual Education. By Daniel E. Griffiths and John R. Lannon. Presents the programs in the teaching of moral and spiritual values of four schools, to demonstrate how this problem can be approached and what solutions are possible. Capital Area School Development Association, New York State College for Teachers, Albany. 50 cents.

Tear Sheets for Teaching. By Charles H. Dent, Leonard B. Ambos, and Nancy M. Holland, all of the University of Texas. A pictorial review of methods for assembling visual materials from newspapers, periodicals and free promotional literature for classroom use. Visual Instruction Bureau, Division of Extension, University of Texas, Austin 12. \$1.

How Children Can Be Creative. By Wilhelmina Hill, Helen K. Mackintosh and Arne Randall. Bulletin 1954, No. 12, U.S. Office of Education, U.S. Government Printing Office, Washington 25, D.C. 15 cents.

Arithmetic—Children Use It! By Edwina Deans. Association for Childhood Education International, 1200 15th St., N.W., Washington 5, D.C. 75 cents.

Expanding Horizons of the Elementary School. Edited by Hallie Azbill, Laura Houk and Dorothy McCabe. Yearbook of the Kansas Association of Elementary School Principals.

Baited Bulletin Boards. A handbook for teachers. Prepared by Thomas Arthur Koskey. Globe Printing Company, 1445 South First St., San Jose, Calif.

Curriculum Materials in High School Mathematics. By Kenneth E. Brown. Bulletin 1954, No. 9, U.S. Office of Education. U.S. Government Printing Office, Washington 25, D.C.

School Music Handbook. A guide for music educators. By Peter W. Dykema and Hannah M. Cundiff. Designed to meet the needs of classroom teachers and special music teachers in the grades and junior high school. C. C. Birchard & Company, 285 Columbus Ave., Boston. Pp. 669. \$5.

INTERCULTURAL EDUCATION

Education in a Transition Community. By Jean D. Grambs. Information about the experiences of integration as it has occurred in several communities

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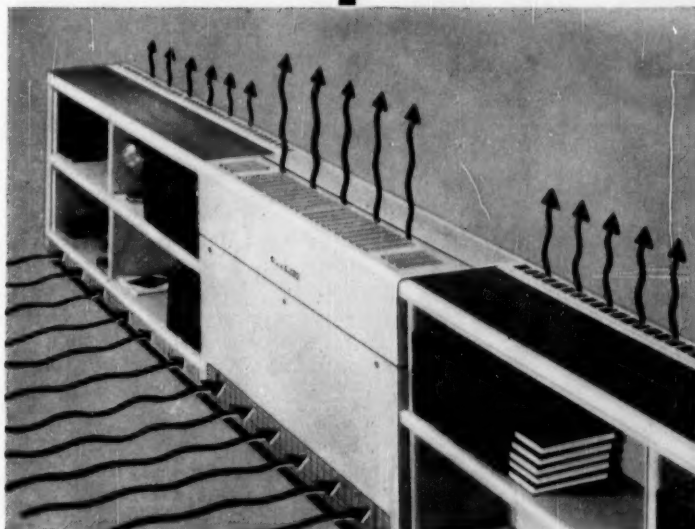



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has been gathered for the guidance of administrators and teachers who are faced with this problem in their schools. Integration of pupils of other minority groups (racial, other than Negro, national, religious, social and economic) is also considered. A bibliography of helpful materials on integration is included. Commission on Educational Organizations, National Conference of Christians and Jews, Inc., 381 4th Ave., New York 16.

PUPIL PERSONNEL

Encouraging Future Scientists: Careers in Science Teaching, Student Projects, and Available Materials and Services. A series of three pamphlets designed to encourage college graduates and high school students to consider teaching of sciences in high school as a profession. Pamphlets are illustrated. National Science Teachers Association, 1201 16th St., N.W., Washington, D.C. 50 cents.

Following Graduates Into Teaching. By Effie G. Bathurst and Jane Franseth. U.S. Office of Education, Bulletin 1954, No. 6. U.S. Government Printing Office, Washington 25, D.C. 25 cents.

Beginning Jobs for Young Workers. Illustrated wall charts prepared by the vocational service bureau of the B'nai B'rith, 1761 R St., N.W., Washington 9, D.C.

SCHOOLHOUSE PLANNING

Functionality of Elementary School Desks. By Leroy K. Pinnell, associate professor in education, Eastern New Mexico University. Bureau of Laboratory Schools Publication No. 5. University of Texas, Austin 12. Pp. 160.

OF GENERAL INTEREST

The Nation Looks at Its Resources. Report of the Mid-Century Conference on Resources for the Future in Washington, D.C., December 1953. Provides a record of discussions at the conference by experts and laymen on the conservation of natural resources in view of possible shortages, production and consumption, the problems of world relationships, research policies, and patterns of cooperation. Resources for the Future, Inc. Distributed by George Banta Publishing Company, Menasha, Wis. \$5.

The Schools We Need—Now and for Tomorrow. A report to the citizens of New York State by the regents council on readjustment of high school education.

Report of the Eighth National Conference on Citizenship. Published by the citizenship committee of the National Education Association, 1201 16th St., N.W., Washington, D.C. 50 cents.

The School That Built a Nation. By Joy Elmer Morgan. Horace Mann Lecture, 1954. University of Pittsburgh Press. \$1.

Seventh Yearbook of The American Association of Colleges for Teachers Education. 11 Elm St., Oneonta, N.Y.

FROM SCHOOL DISTRICTS

Operation and Maintenance of School Buildings. Annual report of the superintendent of schools, City of New York. Pp. 25.

Practices in Experimental Core Classes. Curriculum Bulletin 1953-54 series, No. 8. Board of Education of the city of New York. Pp. 81.

A Guide to Some Educational Resources in the City of New York. Cur-

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riculum bulletin, 1953-54 series, No. 7. Board of Education of the city of New York. Pp. 107.

New Intermediate Manual. A teachers' guide for Grades 4, 5 and 6. Curriculum Bulletin 400. Board of Education, Cincinnati.

3,500 Citizens Looked at Our Schools. A survey of the schools at Springfield, Ill., by the citizens of the community, with the assistance of consultants from the University of Illinois.

Published by the Citizens School Survey Committee, Springfield, Ill.

Teaching Spelling. Course of study and manual. Curriculum Bulletin, 1953-54 Series, No. 6. Board of Education, New York City.

School Facts. Annual report of the board of directors of the school district, Kansas City, Mo.

Reading: The First R. Superintendent's annual report, 1953-54. Cincinnati public schools.

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They minimize supervision and work load requirements for instructors. They end laborious and costly maintenance. The large "Zero Precision" Tapered Roller Spindle Bearings hold their accuracy in spite of student abuse. Bearing maintenance is reduced to a fractional turn of a take-up collar after long hard usage.

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COMING EVENTS

FEBRUARY

26-March 2. Regional convention, American Association of School Administrators, St. Louis.

26-March 2. American Educational Research Association, regional meeting, St. Louis.

27. National School Public Relations Association, regional conference, St. Louis.

28. Educational Press Association, St. Louis.

MARCH

6-10. Association for Supervision and Curriculum Development, Chicago.

12-16. Regional convention, American Association of School Administrators, Denver.

13. National School Public Relations Association, regional conference, Denver.

14. American Educational Research Association, regional meeting, Denver.

14. Educational Press Association, Denver.

16-19. Department of Elementary School Principals, N.E.A., Chicago.

31-April 2. Southeastern Association of School Business Officials, Birmingham, Ala.

APRIL

2-6. Regional convention, American Association of School Administrators, Cleveland.

3. National School Public Relations Association, regional conference, Cleveland.

4. American Educational Research Association, regional meeting, Cleveland.

4. Educational Press Association, Cleveland.

11-15. Association for Childhood Education International, study conference, Kansas City, Mo.

11-16. National Art Education Association, biennial meeting, Cleveland.

18-21. National Education Association, third regional instructional conference, Denver.

18-22. Department of Audio-Visual Instruction, N.E.A., annual convention, Los Angeles.

20-22. Pennsylvania Schoolmen's Week, University of Pennsylvania, Philadelphia.

MAY

1-3. Ninth annual meeting of Presidents of State Associations of School Administrators, Louisville, Ky.

9. National Citizens Commission for the Public Schools, annual dinner, New York.

23-25. National Congress of Parents and Teachers, annual convention, Chicago.

JULY

3-8. National Education Association, 93d annual convention, Chicago.

4-7. National School Public Relations Association, annual meeting, Chicago.

11-22. Department of Classroom Teachers, N.E.A. national conference, West Lafayette, Ind.

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calls for
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Without Excessive Solar Heat or Eye-Fatiguing "Raw" Sunlight**



The Thomy Lafon School, New Orleans, La., acknowledged to be an outstanding modern design, makes extensive use of Coolite, Heat Absorbing, Glare Reducing Glass. It's unique qualities fit the aim of the architects and engineers, Curtis & Davis, to obtain "the ultimate in scientific achievement for natural lighting . . . a truly functional architecture adapted to human values and physical needs." For Coolite floods classrooms with softened, glare-free light for easier seeing . . . absorbs up to 50% of the solar heat to help keep interiors comfortable.

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Consider Coolite for your classrooms when you build or remodel. Translucent glass by Mississippi for better daylight illumination is available in a wide variety of patterns and surface finishes to fit any daylighting need within any school budget.

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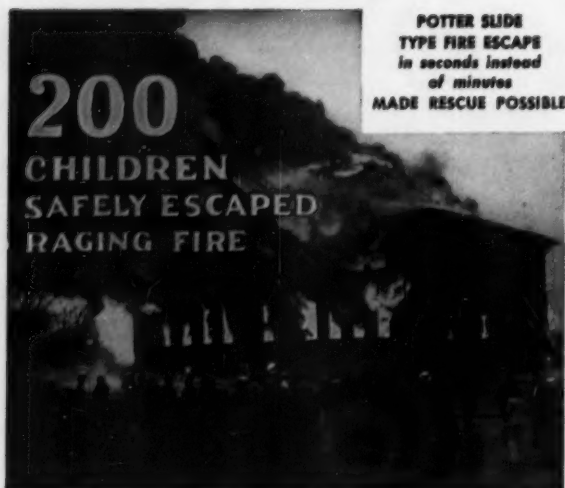
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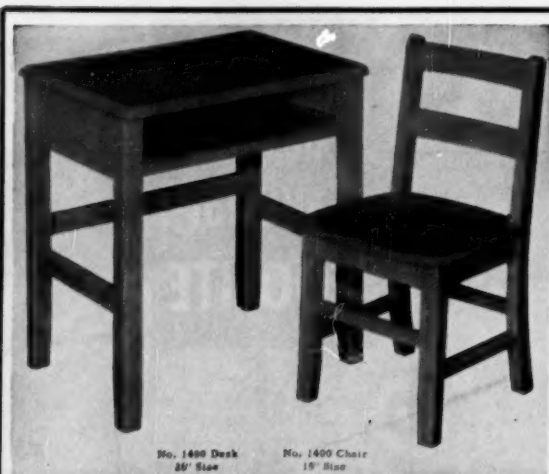
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SUPERIOR SCHOOL FURNITURE

Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, Tablet Arm Chairs, and Teachers Desk.

Also available with plastic surface.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated
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WITH A
DIFFERENCE**

**Exclusive
SUPER-BONDED
9-PLY Construction**

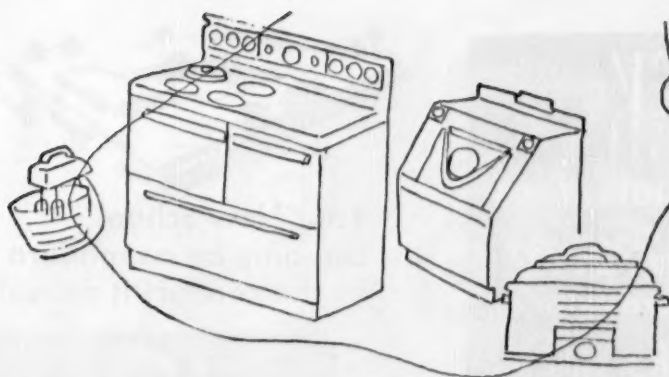
You can see the superior difference in the surface, in the edges and inside.

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world's toughest
TABLE TOPS

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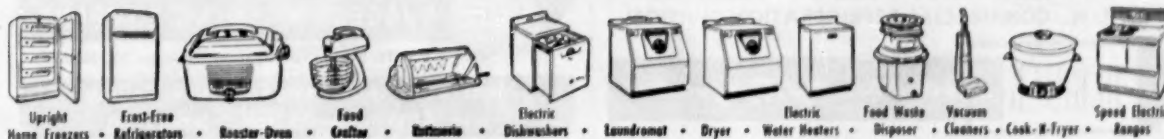
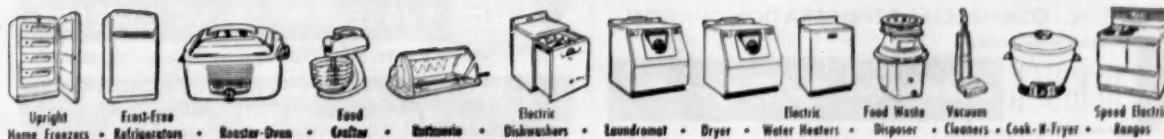
School executives find there's no depreciation of equipment dollars under the Westinghouse School Plan. **HERE'S HOW IT WORKS:**

1. For about $\frac{1}{2}$ retail cost a new Westinghouse appliance is installed in the school home economics laboratory. Schools may buy a single appliance . . . or as many as they need.
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For full details . . . Send for free folder on the Westinghouse School Plan. Order copies for yourself and others concerned with purchasing of teaching equipment. Offer limited to continental U. S. A. Write to:

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HERRICK

STAINLESS STEEL REFRIGERATORS

Performance-Proved
in food service award-winner

at **FAMOUS-BARR**, St. Louis, Mo.



A major Institutions Magazine 1954 Food Service Award went to the remodeled dining rooms and kitchen at the Famous-Barr Company in St. Louis. Designers of the project were Justin H. Canfield and Fred Rundall. HERRICK units were supplied by Southern Equipment Company. At left is a picture of the Famous-Barr downtown department store, St. Louis landmark.



Above is part of the modernized kitchen. It shows a HERRICK stainless steel, double front pass-through top mounted refrigerator used for desserts, salads and sandwich materials. At right is a two-door HERRICK for holding sauces, condiments and small quantities of items used from day to day. Other HERRICK units include a refrigerator-freezer combination and a short-order refrigerator.

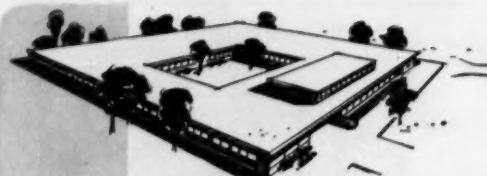


In line with its policy of continued modernization, Famous-Barr Company, St. Louis department store, has transformed its tea room into two deluxe dining rooms, both served by one central kitchen. The St. Louis Room and Rose Room offer the very latest and finest dining facilities. In line with its policy of buying only the best equipment, Famous-Barr has selected HERRICK Stainless Steel Refrigerators for the new kitchen. • HERRICK Stainless Steel Refrigerators assure the utmost in sanitation and employee convenience. From meats to salads... eggs to ice cream... they provide year-after-year complete food conditioning. Write for the name of your nearest HERRICK supplier.

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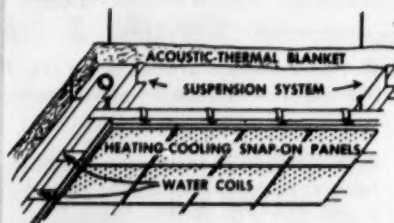


Your New School
can only be as modern
as the comfort it provides

That's Why

BURGESS-MANNING
3-Way Radiant Panel
Functional Ceilings

—enjoy a prominent place in the plans of the most modern schools, which have received national acclaim for excellence in design. It is the simplest of all multi-function, suspended construction and designed for fully automatic control.



It combines, for the first time, uniform radiant panel heating and/or cooling with ideal room acoustics for a new standard of human comfort, health, and efficiency. Both heating and cooling are accomplished with the same coils. The double-duty character of this component affords both design and operating simplicity, as well as being an important and desirable influence on the cost of installation. Acoustic control is accomplished with an acoustic-thermal blanket placed above the heating-cooling coils, which also serves the dual purpose of a thermal insulation. Here is the most modern, efficient, and economical comfort consideration in your new school or addition.

The Facts

—are all given in Bulletin A-129-N
Write for them

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Manufacturers of 3-way Functional Ceilings
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Teaching and learning skills guided the design of the new Royal Electric

As a teaching and learning classroom tool, we believe you will find that the new Royal Electric was designed for you and your pupils. Take, for instance, the . . .

Speed-flo Keyboard. The pupil discovers that the touch is smoother and more responsive than that found on any electric typewriter yet designed. It is faster, yet completely under the typist's control.

Quiet Carriage Return Mechanism. Royal's new Quiet Return Mechanism is the quietest, smoothest, and fastest of any in the field. Carriage return technique is consequently simplified and speeded up.

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mistake, because these repeat keys are independent of the regular keys.

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ROYAL®

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The "PAYOFF" for selecting doorware carefully...

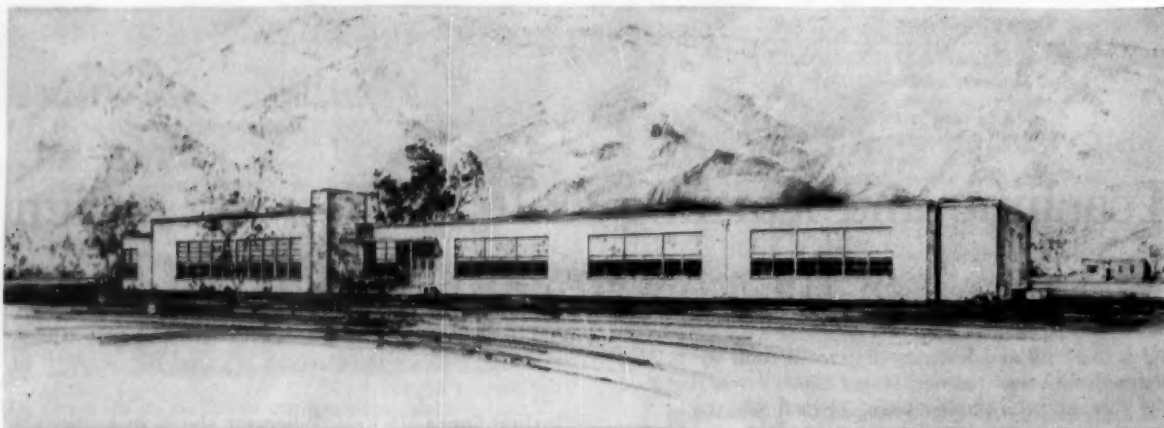
Protection against knob wobble is one of several advantages offered by "Stilemaker" Locks and Latches. A seamless tubular shank assures full torsional strength . . . double dog flange provides maximum rigidity.

Sound designing and construction of Russwin "Stilemaker" Heavy Duty Locks and Latches are proving the economy of quality on school installations from coast to coast.

Construction features include:

1. Seamless tubular knob shank
2. Double dog flange on knob shank
3. Extra large bearing on latch retractor
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5. Full $\frac{3}{8}$ " bolt throw
6. Can be master keyed or grand master keyed
7. Exclusive Russwin ball bearing pin tumbler type cylinders
8. Approved by Fire Underwriters' Laboratory of Chicago for Class B, C, D and E doors

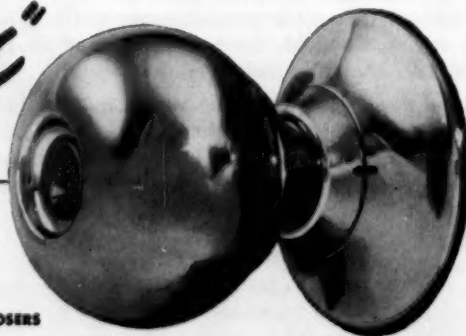
Consult your authorized Russwin specialist for complete details. Russell & Erwin Division, The American Hardware Corporation, New Britain, Conn.



Bel-Air Elementary School, Albuquerque, New Mexico
equipped with "Stilemaker" Locks and Latches
Architect: Louis C. Hesselden A.I.A.

RUSSWIN® "Stilemaker"

All Popular Functions
Four Attractive Designs



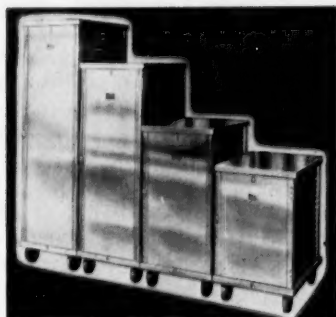
What's New FOR SCHOOLS

MARCH 1955

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 232. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Utility Cabinets for Food Service



Cres-Cor Hi-Tensile Line Utility Cabinets are designed to permit transfer of food or other items within a building or for truck delivery. They are constructed of extremely hard aircraft-type aluminum for ease of handling and stability under hard use. The corrugated sides support a standard pan and permit spacing to fit need. An angle-edge, stationary type pan support is available if desired.

The new type, one panel door increases sanitation and is fastened by a newly designed lock. The cabinets are attractive in appearance, easy to keep clean and are available in several sizes. Crescent Metal Products, Inc., 18901 St. Clair Ave., Cleveland 10, Ohio.

For more details circle #864 on mailing card.

Plastic Panels for Light Diffusion

Two new plastic panels have been introduced by Celotex for ceiling installation for high light levels. Uniform light transmission without glare is achieved with the panels which have attractive embossed designs in four basic patterns. They are also available in special designs for custom installations.

Lumicel is a plastic panel for translucent ceiling installations. Acousti-Lux is a pair of plastic panels welded together at their perimeters to provide sound absorption through diaphragmatic action of the air space. Both light diffusion and noise reduction are provided by Acousti-Lux ceilings.

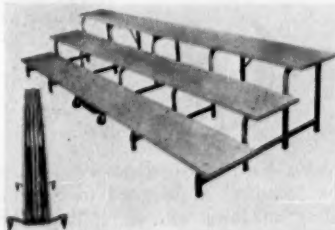
Panels are 24 by 24 inches, made of white vinyl chloride acetate plastic and installed by means of a metal suspension system. They can be moved when neces-

sary but are kept in place with mechanical devices. The panels have an anti-static coating to repel dust but they may be removed for washing when necessary. The Celotex Corporation, 120 S. La Salle St., Chicago 3.

For more details circle #865 on mailing card.

Choral Risers Are Folding and Portable

Efficient use of space for a variety of purposes is made easier with the new Erickson Portable Fold-A-Way Standing Choral Riser. The 12 foot unit can accommodate up to forty singers using the three levels of the riser and the floor. Several units may be combined for large choirs with Erickson "Instant Inserts" for semi-circular arrangements. The riser is strongly constructed of 9-ply plywood



and square formed steel tubing to withstand hard use.

The new unit can be folded in a matter of seconds by one man. The under-structure folds or unfolds automatically when released. When folded the compact unit can be quickly wheeled through doors and corridors to place of need on its own rubber-tired casters. Haldeman-Homme Mfg. Co., 2580 University Ave., St. Paul 14, Minn.

For more details circle #866 on mailing card.

Louver-Diffuser Is Versatile Unit

The GrateLite Louver-Diffuser, made up of thousands of open 3/8 inch cubes, can be used as a bottom in all new Guth fluorescent fixtures. These cubicles maintain low brightness with high foot candles, provide excellent shielding and diffusion, reduce room noise and diffuse air conditioning. GrateLite's closely spaced vanes make it able to stand severe usage. The Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.

For more details circle #867 on mailing card.

(Continued on page 186)

Pre-Mixed Mortar and Grout Are Strong and Shrinkproof

Two time-saving building products are now being made available in ready-to-use form. Embeco Pre-Mixed Mortar and Embeco Pre-Mixed Grout are convenient to transport and to handle on the job and are non-shrink in use. They are composed of carefully blended, laboratory tested ingredients and have high compressive and impact-resistant strength, toughness, oil and water resistance, and set quickly.

The new products are useful in patching, repairing, grouting and caulking. They save time in assembling ingredients and the carefully prepared formula makes them more efficient in use. Only the addition of water is needed on the job to prepare Embeco mixes for use. The Master Builders Co., 7016 Euclid Ave., Cleveland 3, Ohio.

For more details circle #868 on mailing card.

Books Easily Copied With Book-Printer

Copies can be made directly from the pages of any book with the new Cormac Book-Printer. It makes individual photocopies of each page or part of a page from books, documents or pamphlets of any thickness. Anything written, printed, typed, drawn, stamped or photographed can be copied in black and white at small cost. The unit plugs into any electric outlet and is designed for use with the regular processing units in the



Cormac line. The machine is sized for desk top operation and is readily portable. Cormac Industries, Inc., 80 Fifth Ave., New York 11.

For more details circle #869 on mailing card.

What's New ...

Seating Space Saved With Tablet Armchair

Comfortable seating is provided in a minimum amount of space with the new No. 2800 Tablet Armchair. The unit is



attractive in appearance, durable in construction and requires a minimum of maintenance. The sloping tablet gives seating and writing comfort and the built-in book rack under the seat is practical and convenient.

Matching wood grain Nevamar high-pressure laminates are used to surface the writing arm for minimum maintenance and long life. It is highly resistant to stains and will not chip, crack or peel, according to the manufacturer. The top is sealed with Wynene "T" edging. Solid hardwood and hardwood veneers are used in the construction of the chair which has non-skid plastic glides to protect floors and reduce noise. National School Furniture Co., Odenton, Md.

For more details circle #870 on mailing card.

Interior Wall Tile Reduces Costs

Keramet Ceramic Glazed Structural Facing Tile has been developed to reduce the cost of interior walls. It was especially engineered to meet the needs of school construction budgets and rigid performance requirements. It has a gray speckled satin-mat finish that harmonizes with all decorative plans and assures good light reflectivity. Keramet has a first quality ceramic surface on genuine clay tile and comes in a simplified line of 6T Series Shapes to save design time. Metropolitan Brick, Inc., Canton, Ohio.

For more details circle #871 on mailing card.

Enriched Flour for Institutional Use

An all-purpose enriched flour is now being introduced for the institutional market. It is packaged in 25 pound paper and 100 pound cotton bags and is suited for food service operations. Monarch Finer Foods Division, Consolidated Foods Corp., 135 S. La Salle St., Chicago 3.

For more details circle #872 on mailing card.

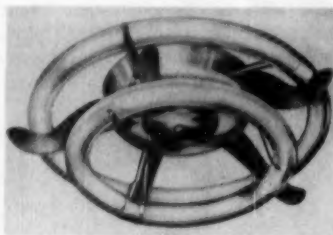
Nonfat Dry Milk Is Instantly Mixed

The new Instant Pet Nonfat Dry Milk has free-flowing granules of pure skim milk solids which dissolve instantly, even in ice-cold water, by simply stirring lightly with a spoon. The flavor of the earlier product is retained as is the maximum fresh-milk taste and all of the nourishment of the original skim milk. The new product is packed in wide-mouth glass jars to ensure freshness and long storage life, and to provide for easy measuring and resealing of the package. Pet Milk Company, 1401 Arcade Bldg., St. Louis 1, Mo.

For more details circle #873 on mailing card.

Circline Fixture for Low Brightness Lighting

The "Saturn" is a new circline lighting fixture which combines the efficient new 40-watt circline lamp with the standard 32-watt lamp. It is effective in installations where exceptionally high light output is required. Perforated steel louvers are utilized not only as lamp supports, but also as an effective means of obtaining a low brightness effect.



The "Saturn" is designed to eliminate ceiling shadows without cutting down on lighting performance. It is available in white baked enamel with chrome center ornament, or in all-chrome. Louvers are finished in aluminum gray and instant-lighting ballasts are incorporated. Carter Lighting Co., Chelsea 50, Mass.

For more details circle #874 on mailing card.

Educator 500 Projector Has Increased Illumination

An entirely new condensing system has been built into the Educator 500 Projector to increase illumination by 46.8 per cent, according to the manufacturer. Designed for use with 2 by 2 inch slides and 35 mm. single and double frame filmstrip, the improved 500 watt projector produces high quality projected light for greater screen brilliance. A new "pressurized" cooling system has been incorporated into the improved model for complete protection of projected film and for comfortable handling of the machine. Greater convenience and ease of operation are afforded by the new simplified filmstrip unit. American Optical Co., Projector Div., Chelsea, Mass.

For more details circle #875 on mailing card.

Asphalt Roof Shingles Are Wind Resistant

A wind and water resistant asphalt roof shingle which seals itself to the one below by means of a petroleum resin adhesive has been developed by Johns-Manville. The adhesive is applied to the shingle, known as the Seal-O-Matic, at the factory. After exposure to the sun's heat it softens and merges with the shingle below. Thus, each shingle is continually welding itself to the one below. Seal-O-Matic shingles are available in a range of blends and colors in strips 12 by 36 inches with three square cut butts. Johns-Manville, 22 E. 40th St., New York 16.

For more details circle #876 on mailing card.

Light Weight Scaffold for Indoor and Outdoor Work

Designed for light duty work outdoors or indoors, the new Safway steel scaffold provides platform heights up to 12 feet. It can be assembled in five different forms for use by maintenance men and others requiring a stable but light duty platform. The new scaffold is low in cost, easy to assemble in the form required, and easy to take down, transport and store. Safway Steel Products, Inc., 6234 W. State St., Milwaukee 13, Wis.

For more details circle #877 on mailing card.

Visual Experiment Possible With Electronics Kit

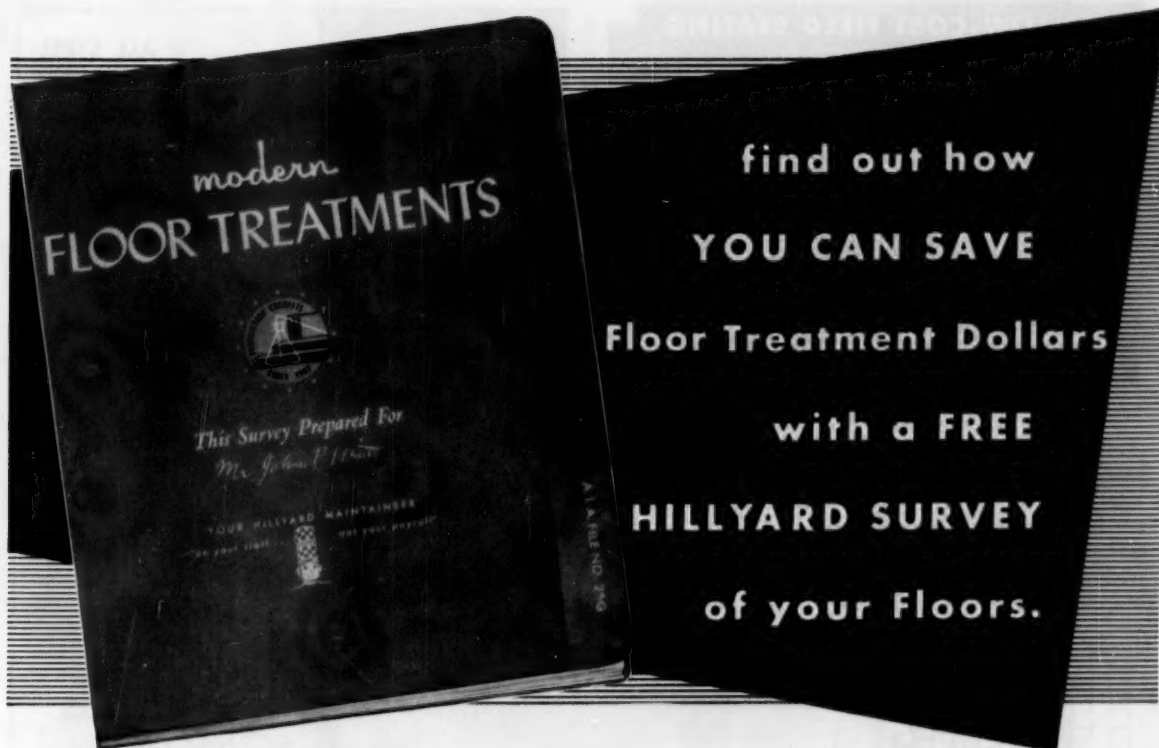
Students who have completed the beginners' electricity course can go into the study of electronics with the new Basic Electronics Kit. Model 50-A is a low cost model for visual experiment which permits students to learn by doing. The kit contains 82 precision components for performing sixty experiments in electronics fundamentals. Included in the kit is a 275 page illustrated manual, "Experimental Electronics for the Beginner," which serves as a guide to each



step in the experiments. The kit is designed for use in school shop courses, armed forces training schools and other educational programs. Crow Electric-Craft Corp., 1102 Shelby St., Vincennes, Ind.

For more details circle #878 on mailing card.

(Continued on page 190)



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From Survey to Service you'll find Hillyard specialized floor treatments provide complete protection, beauty and economy—safe for your floors—safe for those who walk on them—built to last longer because they're made to answer particular school floor treatment problems. They're famous for quality. The Hillyard "Maintainer" near you is trained to efficiently and quickly make a *FREE* survey of your floors and present a plan especially prepared for you. He will show you how your floors can be more beautiful—yet prove important savings in labor and materials through Hillyard plan for all floors.

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Please have your Maintainer call and make a free survey of my floors.

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AMERICAN-UNIVERSAL "PORTABLE" BLEACHER

A COMPLETE "PACKAGE-UNIT"

Nothing else to buy. Ruggedly built of prefabricated, welded-steel panels—safety engineered—weather proofed for minimum maintenance. You need no expensive foundations, can easily install this American-Universal skid-mounted Bleacher with unskilled help. One complete package-unit—at lowest possible cost.



Basic 5-row unit seats 50.
Unlimited combinations for up
to 10 and 15-row installations.

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BY

CONN



THE
Artist... INDEPENDENT
MANUALS, 25-NOTE PEDAL BOARD

Ideal for classroom or auditorium, this new, larger organ, the ARTIST, by CONN, is the all-around favorite of those who want a really fine moderately priced instrument. Compare the tone, the "voices" and the performance—with any other organ. Choose CONN and your school will have America's Finest. C. G. CONN Ltd., ORGAN DIVISION, Department 330, Elkhart, Indiana.



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YOU CAN BE SURE that your stored
films will be safe from dust, heat
or dryness with NEUMADE COM-
BINATION STORAGE UNITS!



Model MM-119—A practical stor-
age cabinet for the varied film
library. Holds 400, 800, 1200, 1600
ft. reels; 100 filmstrip cans plus util-
ity drawer in base. Overall size:
30" wide, 70" high, 16" deep. Over
50 models to choose from. Write for
free catalog.

TRADE MARK
Neumade

PRODUCTS CORPORATION
330 West 42nd Street
New York 18, N. Y.

PROTECTS
YOUR
FILM!



Bad marks on your floors?



They'll pass with

Bassick glides!

Put shock-absorbing Bassick Rubber-Cushion Glides on school tables, chairs, desks and similar furniture — and your floors will never flunk inspection! Broad, flat base of highly polished steel whispers across floors with never a mark. Start using them today — your floors deserve them. THE BASSICK COMPANY, Bridgeport 2, Conn. In Canada: Belleville, Ont.



Bassick

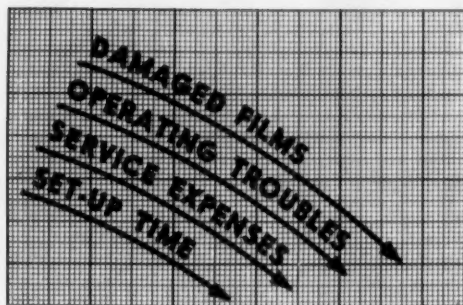
A DIVISION OF



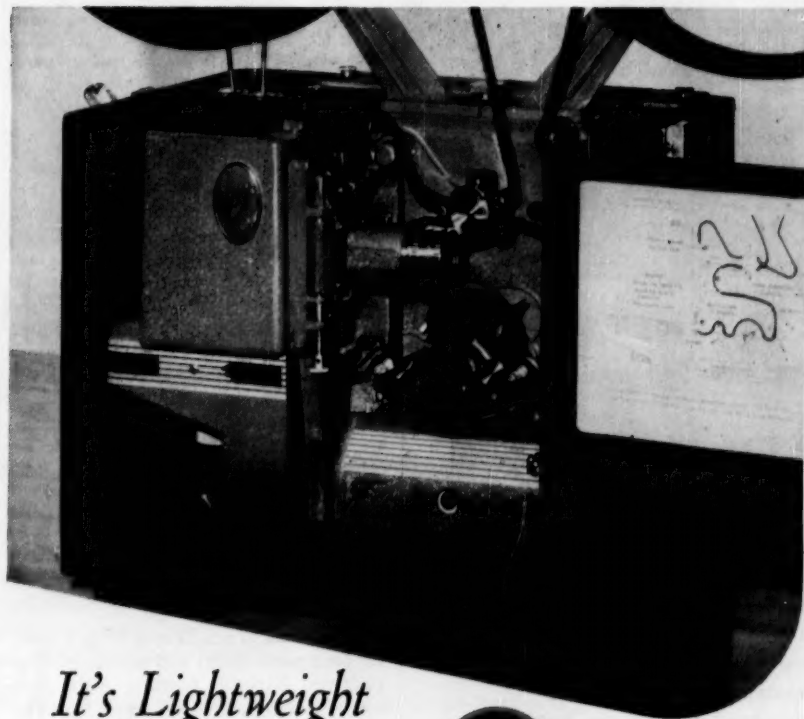
MAKING MORE KINDS OF CASTERS... MAKING CASTERS DO MORE

The NATION'S SCHOOLS

AUDIO-VISUAL COSTS GO DOWN when the NEW VICTOR COMES IN



Your budget goes further with Victor 16mm Sound Projectors. For even inexperienced operators can't damage films on a Victor. Safety Film Trips stop the projector *before* harm is done to your film. And Victor's all-around smooth operation eliminates troubles, reduces servicing and increases usage. Check these Victor features: LUBRIMATIC OIL SYSTEM • AIR-CONDITIONED LAMP ENCLOSURE • HI-LITE OPTICAL SYSTEM • SAPPHIRE-TIPPED PAWLS • AIR-CONDITIONED FILM GATE • FLAT FIELD LENS • COMPENSATING FILM SHOES • STATIONARY SOUND DRUM • 180° SWING-OUT LENS



The NEW VICTOR
is easy as
1-2-3 to operate

- 1** Easy 3-spot threading . . . over sound drum, through film gate, on to single drive sprocket.
- 2** Easiest to operate (with finger-tip control panel, softly illuminated). Start motor, turn on lamp, adjust sound volume.
- 3** Easiest on your films—3-spot safety film trips protect films by stopping projector immediately in case of emergency.

It's Lightweight

and it's available in 3 models—one for every audience and budget.

- 1** CLASSMATE 4
for small audiences.
- 2** ASSEMBLY 10
for medium-sized audiences.
- 3** SOVEREIGN 25
for large audiences.



SEND FOR FREE FOLDER TODAY

VICTOR *Animatograph Corporation*

Dept. A-35, Davenport, Iowa, U.S.A.
New York—Chicago

Superb Sound and Picture Quality—Always

QUALITY MOTION PICTURE EQUIPMENT SINCE 1910

**the answer to
wardrobe space +
SAFETY + SERVICE**



SINCE
EMCO
1932

classroom wardrobes



Essentially an Emco wardrobe system gives an attractive well-planned area for storing children's wraps—but more than this, Emco wardrobes are known for their safety and long service. For instance, there are no obstructions to trip a child in the recess . . . no overhead weights to fall . . . doors latch open with plenty of space between so hands cannot be pinched . . . and proper ventilation around garments is assured by exclusive hook arrangements. Finally, Emco hardware is better designed and made of materials which will give service for the life of the school building.

Write for complete information

The new Emco catalog gives you complete specifications on the complete line of Emco wardrobes and accessories. Write for your free copy today.



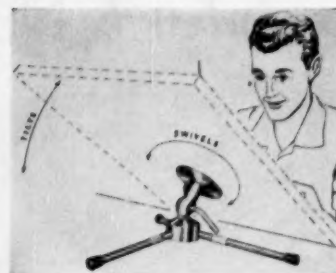
**EQUIPMENT
Manufacturing Co., Inc.**

1402 Spruce St. Dept. NS, Kansas City, Mo.

What's New . . .

**Drawing Stand
Forms Adjustable Table**

Attached to any board, the new Multipurpose "Safe-Lock" All-Angle Drawing Stand forms an adjustable drawing table. It locks at any angle and will swivel or tilt to any desired position. Screws are



provided for mounting on any board and rubber tipped legs protect table or desk tops. The stand is made of hand polished aluminum, is convenient for use on any table or desk, and may be stored in minimum space when not in use. **Arasco American, Inc., 3308 Edson Ave., New York 69.**

For more details circle #879 on mailing card.

**Executive Partitions
for Flexible Interiors**

Completely flexible interiors for efficient control of space are provided with the Mills New Executive Partitions. Available in all-steel and steel and glass combination, the units are light in weight and have low maintenance requirements and maximum mobility. Among the exclusive features to be found is a continuous, flush baseboard with no protruding surfaces at the base of panel connections or pilasters. The partitions are available in any specified shade or color. **The Mills Co., 995 Wayside Rd., Cleveland 10, Ohio.**

For more details circle #880 on mailing card.

**Photograph Strips Copied
with Strip Printer**

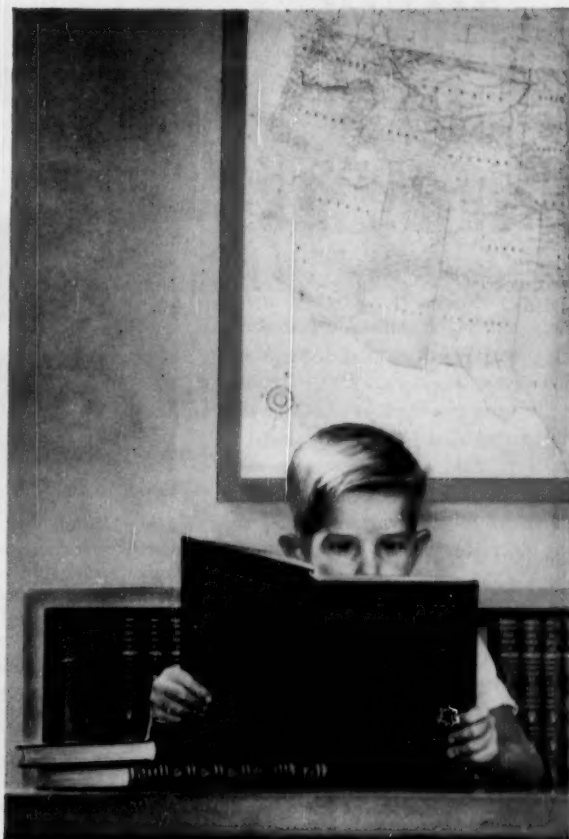
The Diafix 35 is a 35 mm. Strip Printer for both paper prints and perforated film positives. Exposure is made in the dark room easily, safely and quickly. The operation is simple and prints are produced with a minimum of effort. The unit is well constructed and has a man-



ually operated tooth geared arrangement for the advancement of the film and paper in a smooth metal channel. **Burke & James, Inc., 321 S. Wabash Ave., Chicago 4.**

For more details circle #881 on mailing card.

(Continued on page 192)



HE KNOWS THE ANSWER...AND THIS IS WHY!

He's the boy you can count on to give you the right answer when his classmates give you only puzzled looks. He's the boy who reads **THE BOOK OF KNOWLEDGE**.

Reinforces the teacher's effort. Here is a reference work that actually teaches *with* the teacher! Kept in constant reach in the classroom, **THE BOOK OF KNOWLEDGE** develops the vital habit of *looking it up*, and rouses that great ally of every teacher: curiosity. But **THE BOOK OF KNOWLEDGE** is *more* than just a reference work. Teachers find its comprehensive articles valuable as supplementary texts, while its 20 volumes provide as many as 20 simultaneous study projects.

Makes children want to learn. **THE BOOK OF KNOWLEDGE** is unique because it starts where other reference books leave off.

Here, the child who looks for a fact finds it . . . quickly, easily . . . in an article as technically correct as continuous revision can make it. (Last year alone, 1 out of every 7 pages was revised to keep this reference work modern.) But the child finds much more. He finds a news-picture format and a narrative technique so fascinating they capture his interest . . . tempt him to read further . . . lead him on to discover other fields of information. Learning actually becomes a pleasant habit!

Enriches the school curriculum. With its 7,607 pages and its 15,000 informative pictures (many in full color), and its 31,000 handy alphabetized index references, **THE BOOK OF KNOWLEDGE** is a valuable addition to any classroom. Have you seen the new 1953 edition? Write today for complete information on **THE BOOK OF KNOWLEDGE**.

THE BOOK OF KNOWLEDGE

THE REFERENCE WORK THAT MAKES CHILDREN WANT TO LEARN

PUBLISHED BY

THE GROLIER SOCIETY INC.

AND SUBSIDIARY COMPANIES

2 West 45th Street, New York 36, N. Y.

America's largest publisher of encyclopedias and reference sets

The Encyclopedia Americana, Grolier Encyclopedia, The Book of Knowledge, Richards Topical Encyclopedia, Lands and Peoples, The Book of Popular Science.

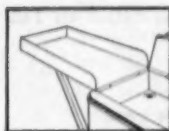
MONEY MAKER DISHWASHER!

"It makes money for me!" say restaurant owners and kitchen managers. Their Kewanee Dishwashers save the wages of a hired dishwasher. Dishes are sparkling clean . . . positively sanitary. Less water and detergent is used — dish breakage is reduced. And some Kewanee owners say the biggest advantage is the speed-up of dishwashing time, requiring fewer dishes.



"Nothing could be simpler," say owners about using their Kewanee Dishwashers. Put dishes, silver, glasses, etc. in basket and place in washing compartment. Every food particle is swept away by turbulent water. 180° rinse water sanitizes—dishes air-dry quickly. All this happens at the rate of over 2000 dishes per hour!

NEW BASKETS are Plastisol-coated . . . resist wear, grease, kitchen acids . . . can't chip dishes. Standard equipment.



SPACE-SAVER DRAINBOARDS are stainless steel . . . handy for cleaning, loading, drying. Two sizes. Optional extra.

IT'S WORTH WRITING to find out all about Kewanee Dishwashers. Drop us a line today for literature and prices—sent free, no obligation of any kind.

Kewanee
DISHWASHER

802 Burlington Ave., Kewanee, Illinois

What's New . . .

Pupils Build Telescope With Optical Kit

Another in the line of "American Industry" Educational Hobby Kits permits pupils to build their own telescopes, learn about optical phenomena, observe light rays and the differences between concave and convex mirrors and lenses. The kit contains a two piece optical bench, stain-



less steel connectors, cheek piece, plain mirror, concave-convex mirror, prism, plastic prism table, color filter card and other parts for experiments and experiences in the optical field.

The Optical Kit was produced by the American Optical Society in collaboration with the Museum of Science and Industry and Encyclopaedia Britannica. Three types of telescopes can be constructed by pupils with the kit, as well as a periscope. The kit is distributed by Central Scientific Co., 1700 Irving Park Rd., Chicago 13.

For more details circle #882 on mailing card.

Parglo Recessed Louvers Adapt to Any Type Ceiling

A "soft" light from parallel glowing fins is obtained with Parglo Louvers, now featured on Eastern Recessed Fixtures. The new louvers are of welded steel and are adaptable for use in any type of ceiling. There are no loose parts, making for simple, one-man installation, and they are completely spot welded for rigidity and strength. Eastern Fixture Co., 170 Vernon St., Boston 20, Mass.

For more details circle #883 on mailing card.

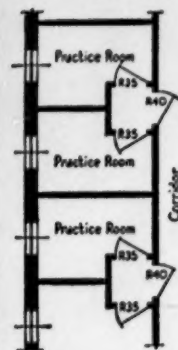
Fyrate Systems for Acoustical Fireproofing

Engineered and developed to provide architects with means to use mechanically suspended acoustical tile and still be able to meet Building Code requirements for fireproofing, Fyrate Systems provides a two hour fire resistive treatment in addition to true level and permanent acoustical tile installation. Tested and approved by Underwriters' Laboratory, Fyrate Systems also greatly reduces air conditioning loads as all plenum spaces are insulated from the usable or air conditioned spaces with the equivalent of four inches of mineral wool. Fyrate, Inc., 823 W. Eastman St., Chicago 12.

For more details circle #884 on mailing card.

(Continued on page 196)

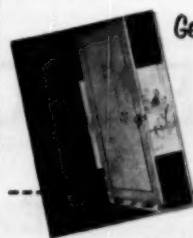
where room to room
NOISE
transmission must
be controlled



NOTHING STIFLES SOUND LIKE HARDWOOD PRODUCTS

SOUND INSULATING DOORS

Isolate disturbing noise and sound from others in music and band rooms, gymnasiums, workshops and hallways with this nationally famous sound insulating door. Pre-measured for sound reduction, you know in advance what the final noise factor of any room can be. Sound Insulating Doors come in 35, 40 and 43 decibel degrees of transmission loss — controlling a full range of sound intensity. Write for details or consult your architect or acoustical engineer — They know this door! Investigate too, our standard solid core flush doors, fire doors, X-ray and shielded doors. All are "custom-made" for your job.



Get this **FREE** brochure

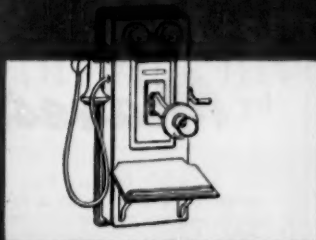
It tells in understandable non-technical language how **SOUND INSULATING DOORS** function — how sound intensity is measured and controlled.

WRITE BOX NS

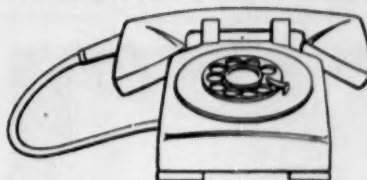
HARDWOOD PRODUCTS CORPORATION
NEENAH • WISCONSIN

NEW YORK • CHICAGO • BOSTON • CLEVELAND

The NATION'S SCHOOLS



Would you have a crank-handle
phone in today's school?



Brunswick

... for the classroom of tomorrow ... today!

Brunswick furniture is designed to meet the requirements of the modern classroom. Flexible and versatile, it adapts quickly to the activity of the moment.

Brunswick tables, available in trapezoidal, rectangular, round and half-round shapes, are easily grouped and feature the hollow-core top that makes for easier mobility. Light enough for children to move, yet sturdy!

Designed for today's needs and with an eye on the future, too, the fresh, smart, functional lines of Brunswick furniture will be as completely desirable in years to come as they are today!

Brunswick

**THE BRUNSWICK-BALKE-
COLLENDER COMPANY**
623 S. Wabash Ave., Chicago 5, Ill.

D-G —MODELS

TORSO and HEAD

life-size

Unbreakable Vinyl-Plastic



a new classroom standard

Y900 Sexless Model	15 parts
Y990 Male Model	16 parts
Y800 Female Model	19 parts
Y989 Combination— Sexless, Male, and Female	22 parts

the nucleus of your teaching equipment

These new Vinyl-Plastic models combine anatomical accuracy with aesthetic appearance. They are engineered to comply with modern teaching requirements. Parts are readily removed and replaced. Turntable base provides for convenient change of viewing angle without lifting the model. 378 of the structures are numbered on the model and identified in the Teacher's Manual.

Write for circular 87. It contains detailed information and is illustrated in color.

DENOYER-GEPPERT Co.

Quality Model Makers Since 1916

5235 Ravenswood Ave., Chicago 40, Ill.

The Number One Value In FOLDING TABLES

by **Midwest**

First in value because they have everything you want in a folding table—modern styling . . . master crafted finishes . . . ease and safety of handling . . . compactness for storage . . . made to last . . . greatest seating comfort.



SPACE PROBLEMS SOLVED

Midwest tables are the perfect solution for effortless low-cost conversion of multi-use rooms. The No. 1 choice of leading schools, clubs and institutions because they set up easily, fold quickly, and store compactly when not in use.

CHECK THESE VALUE-PACKED FEATURES

- Exclusive "off-center" leg design for seating comfort.
- Exclusive safety lock that secures legs in both folded and extended positions.
- Double-braced legs guaranteed 5 years.
- Smooth sanitary tops sealed and lacquered.
- Chip-proof plastic molding.
- Extension legs available to adjust seating heights.

Whatever your table needs, there are Midwest Folding Tables available to meet them . . . in a complete range of styles, sizes and choice of top materials. Write for Free Catalog today!

Midwest

FOLDING PRODUCTS

Dept. 753

Roselle, Illinois

SHOW YOUR COLORS!

... but fly the best!

For schools—DETTRA, flagmaker to the Nation for 50 years, offers American flags and State flags in a wide variety of styles, sizes and materials . . . ideal for schoolroom, assembly hall, playing field.

DETTRA FEATURES

- ★ Famous "BULLDOG" BUNTING
- ★ Long-lasting "DURA-LITE" NYLON
- ★ Beautiful, lustrous "GLORY GLOSS"
- ★ U. S. Flags—State Flags
- ★ School Flags
- ★ Decorations and Banners
- ★ Flag Accessories



ASK ABOUT DETTRA'S NEW MOVIE "OUR U. S. FLAG"—a 16 mm. color movie is the ideal medium through which to tell the story of the Flag.

ASK YOUR
DEALER OR WRITE DETTRA
FOR
DETAILED
DESCRIPTIVE LITERATURE

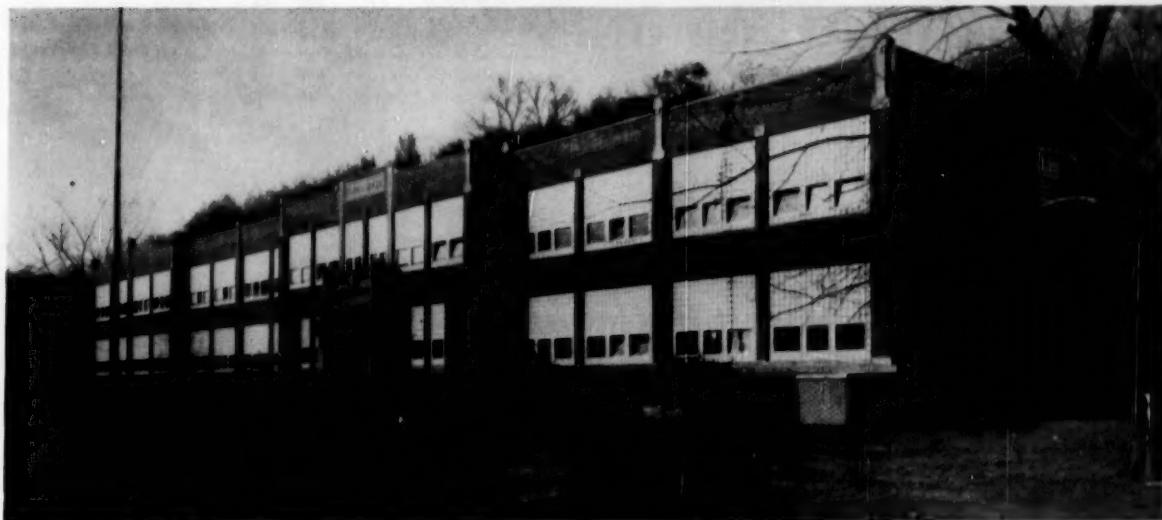
DETTRA FLAG COMPANY, INC.

Dept. N, Oaks, Pennsylvania

(Within sight of Valley Forge)

"PC Glass Blocks will return over 13% annually on the investment"

says **D. F. Klinofelter**
Supt. of Buildings & Grounds
Wilkinsburg, Pa., Public Schools



THE TURNER SCHOOL shown here is 15 years old. In those years, with the old wood sash, the following costs were incurred:

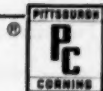
ITEM	COST PER YEAR
Paint sash every 5 years @ \$1000	\$200
Wash windows 3 times per year @ \$700 per year	700
Replace 350 lights of glass per year @ \$6 per light	2,100
Replace window shades every 10 years @ \$2700	270
Total window maintenance cost per year.....	\$3,270

These costs were practically eliminated when the windows were modernized with PC Glass Blocks at a cost of roughly \$25,000. Annual return on the investment was about 13% plus an estimated 10 to 15% annual heating bill reduction. Students and teachers are delighted at the new and improved daylighting.

There are dozens of reasons why school officials choose PC Glass Blocks for window modernization, but the above figures tell the cost story better than any words.

Consult with your architect or write to Pittsburgh Corning Corporation for more information. Address your letter to Dept. AK-35, One Gateway Center, Pittsburgh 22, Pa.

PC Glass Blocks



ALSO SKYTROL® AND FOAMGLAS®
In Canada: 57 Bloor St. W., Toronto, Canada



HERE ARE THE WINDOWS that required so much attention. Notice the characteristic glaring light from the standard sash. Below is the same classroom after PC Glass Blocks were installed. Excellent vision and ventilation is provided by the window ventilation units below the blocks. The good looks of the glass block panels have peeled 10 years off the apparent age of the building.



Stromberg

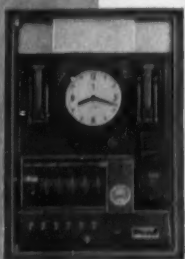
always rings the bell
at the right time



MODERN
SQUARE
CLOCK



ROUND
WALL
CLOCK



MASTER
CONTROL
UNIT



SIGNAL
BELL

Ask, too, about
Fire Alarm Equipment
Attendance Recorders
Time Stamps

TEACHERS CAN RELY ON STROMBERG TIME

Signals for class changes are dependable. The right bell rings at the right time.

SCHOOL OPERATIONS FLOW SMOOTHLY

Several different class schedules can be timed from one master control having a multiple program unit. Signal intervals can range from one minute to 24 hours. Classes change without confusion or waste of time.

CLOCKS ARE CONSTANTLY ACCURATE

Every hour, each unit is automatically checked and synchronized with a Master Unit. Protection against power failure is provided through a jewelled spring power reserve in the Master Unit.

CHOOSE THE SYSTEM YOU WANT

For new schools, or to replace old systems now in use, there are Stromberg clocks and program time controls to meet every desire — and every need.

GUARANTEED FOR QUALITY AND SERVICE

Users of long standing know that Stromberg equipment lasts years beyond normal expectation with a minimum of maintenance. For complete details about the most reliable time and signal equipment made, write

STROMBERG TIME CORPORATION

Subsidiary of General Time Corporation
THOMASTON CONNECTICUT



If it's time • It's Stromberg

What's New ...

Desk-Chairs

Offer Natural Writing Position

Two new desk-chairs are available in the Samsonite line of schoolroom furniture designed by Russel Wright. Light weight steel frames are finished in baked enamel in any of four new colors: turquoise, rust-red, cocoa brown and light gray. The seat and tablet arm are available in plastic laminated to plywood, solid maple or birch, or maple plywood.



The tapered legs have stainless steel glides pivoted on ball socket joints to permit easy shifting without marring floors. The stainless steel resists corrosion and chemical effects of detergents.

The chairs are especially designed to support the arm at a natural writing position with the angle of the tablet adjusted for unstrained writing. The tablet arm chair provides 180 square inches of writing surface and the tablet desk has 290 square inches. Both chairs are available in 16, 17 and 18 inch heights with the arms attached to the right or to the left. Book racks can be provided on the chairs and the inside angle and curve of the tablets is designed for easy sliding in and out. Shwayder Brothers, 1050 S. Broadway, Denver 9, Colo.

For more details circle #885 on mailing card.

Vacuum Cleaner Has High Dirt Capacity

Spic-Span Model 925M vacuum cleaner is especially suitable for schools, hospitals and other institutions where rapid clean-up is necessary. A special feature of this light-weight model is the pleated filter which allows for cooler motor operation and high cleaning efficiency in addition to high dirt capacity. Premier Co., 755 Woodlawn Ave., St. Paul, Minn.

For more details circle #886 on mailing card.

Gymnasium Floor Sealer Is Waterproof

Jim-Kote Lumx is an alkali, acid and water proof sealer for gymnasium floors. It will not darken with age and provides a smooth resilient playing surface that is durable and at the same time furnishes safe sure footing. Made of plasticized resins, Jim-Kote Lumx is easy to apply and maintain. Selig Co., 342 Marietta N.W., Atlanta 3, Ga.

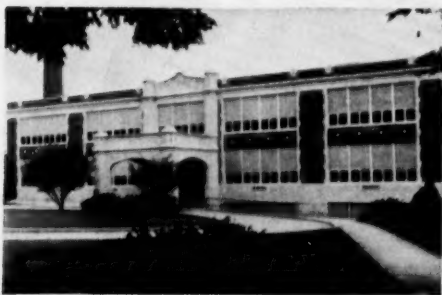
For more details circle #887 on mailing card.

(Continued on page 200)



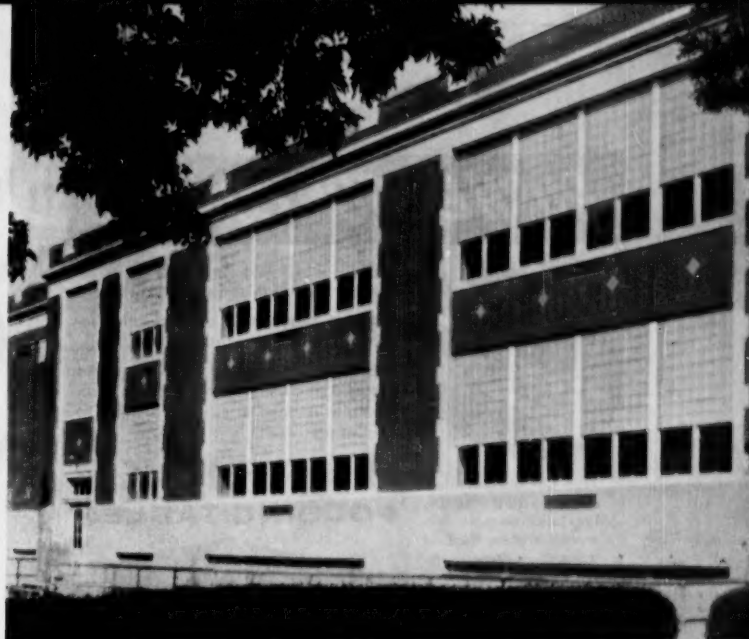
BEFORE

Worn sash let in wintry blasts. Teachers had to continually adjust shades to cut glare. Natural light in rooms was cut and the school presented a patchwork appearance from unevenly adjusted shades.



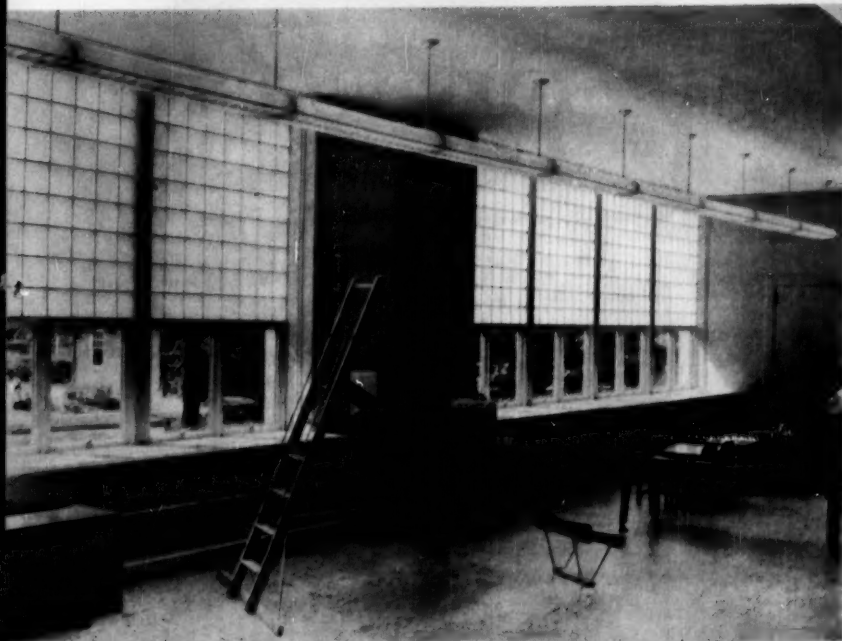
AFTER

See how Owens-Illinois Glass Block improve the appearance of the school. Glass block panels insulate so efficiently and daylight so effectively, heating and lighting costs are cut.



New panels of glass block have practically eliminated maintenance costs. Glass block won't rust or rot, are hard to break. What a change from the old windows which needed constant, expensive maintenance and did not provide healthful daylighting throughout classrooms.

Owens-Illinois Glass Block* solved a maintenance problem while providing better light



With panels of glass block, daylight is directed upward and diffused over all parts of the schoolroom all day long. The combination of light-directing glass block and vision strip keeps brightness at comfortable levels, provides vision and ventilation. Excessive glare and harsh contrasts are eliminated.

THE Wyomissing School at Wyomissing, Pa., was in the same condition as hundreds of other schools across the country. Window sash were worn out and maintenance was a continuous, costly job. Glare, harsh contrasts and inadequate light were big problems.

Replacement with panels of Owens-Illinois Glass Block solved their problem. If you are in the process of remodeling old structures, or building new ones, don't overlook the positive advantages—maintenance economies, better seeing conditions—that panels of glass block bring. For complete information write Kimble Glass Company, subsidiary of Owens-Illinois, Dept. NS-3, Toledo 1, Ohio.

*Formerly known as INSULUX

OWENS-ILLINOIS GLASS BLOCK
AN **I** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

PUSH BUTTON CONTROL



With Barricks patented **AUTOMATIC LEG LOCK**, legs lock in open position and close at the touch of a finger—automatically.

BARRICK'S Folding Tables with "push button" operation reduce setup time.

Exclusive steel center channel construction adds strength—reduces weight.

Choice of rectangular, square or round tables with plywood, formica or blonde hard board tops in sizes and styles to your exact needs.

BARRICKS FOLDING TABLES



See your dealer or write for the complete Barricks story.

2251 S. HALSTED ST.
CHICAGO 8, ILL.

BARRICKS
MFG. CO.

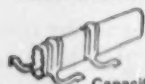
America's Finest Folding Tables



Checkerette® "Fold-away Steel Rack"

Meet a dozen everyday school needs—in auditoriums, laboratories, gyms, cafeteria, shop, classrooms, library, etc. Goes anywhere. Set up in minute without tools. Stores away like folding chair when not in use. Holds wraps, gowns, athletic gear, band uniforms, choir robes, etc., in a compact and orderly manner.

Rail can be placed at 3 different heights to accommodate different age groups, long robes, etc. Lifetime construction—welded heavy gauge box and "U" form sections; baked gray enamel finish. 4 ft. single faced unit takes 24 coat hangers; 4 ft. double faced unit 48. Three foot units also available.



Capacity can be doubled by using snap over coat hooks



Write for Bulletin CT25

VOGEL-PETERSON CO.

"The Coat Rack People"

1121 West 37th Street

CHICAGO 9, ILL.

For effective visual elementary
math teaching

PANA-MATH COUNTING FRAME

ABACUS TYPE



SIZE 20" x 32"

Grade 1 to 4 Requirement

Pana-math is a versatile classroom counting frame for incidental learning of the important concepts of arithmetic. The ancient abacus is now adapted as a modern teaching aid to visualize numbers, groups and relationships by actual arrangement of beads. Sturdily constructed of 13/16" hardwood the frame has 10 removable push-spring rods each with 10 colorful beads. Your teachers will appreciate Pana-math . . . highly commended by teachers, principals and boards (Pat. Pend. . . Reg. App. for)

• Time Teaching Clocks • Folding Easels • Stoves
Sinks • Refrigerators • Ironing Boards
Educational Toys • Jig-saw Puzzles • Peg Boards
Drawing Boards • Playhouse Screens • Beads

DEPARTMENT NS

DAINTEE TOYS, INC.

230 STEUBEN STREET, BROOKLYN 5, N. Y.

Send for "Manual
for Teaching with
Counting Frame"
by Dr. Irving Allen
Dodet.

"TRAFFIC PANEL" TEST PROVES

DOLCOWAX

BEST FOR LONG-LASTING FLOOR BEAUTY!

THE TEST—four sections of flooring, each panel prepared with a different floor wax. All panels subjected to heavy traffic . . .

THE RESULTS—The DOLCOWAX panel retained markedly finer lustre—its beauty actually increased with wear—and it retained scuff and scratch resistance to a greater degree.



DOLCOWAX premium quality floor wax is most economical in the long run. Ideal for "second coating"—the second coat integrates with the first . . . no "crawling" or "puddling" to prevent an even, uniform film.

IMPORTANT: The slip-resistance feature built into DOLCOWAX permits a soft, lovely finish with safety protection! Has Underwriters Laboratories approval, of course.

When preparing floors for waxing, use CINDET, the Dolge all-purpose cleaner, for more complete stripping of old wax film.

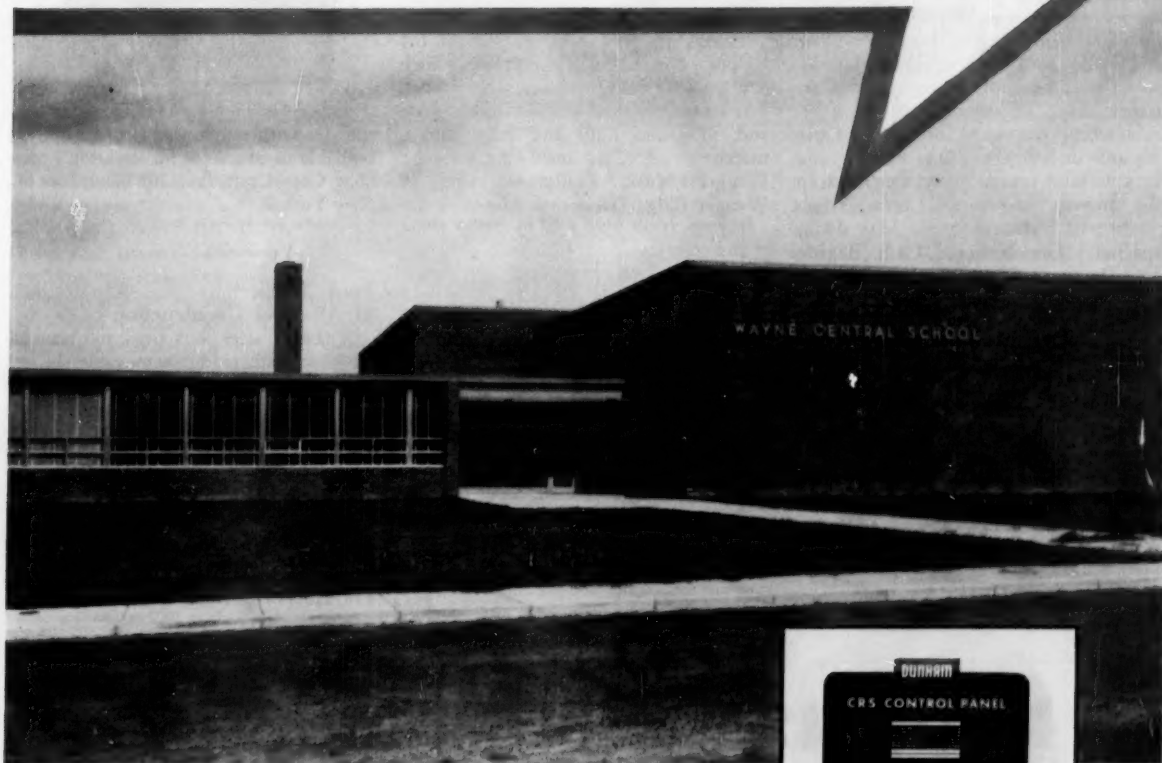
Write for literature; consult your DOLGE Service Man on your floor finishing problems.

FOR FREE
SANITARY SURVEY
OF YOUR SCHOOL
SEE YOUR
DOLGE SERVICE MAN

DOLGE
WESTPORT, CONNECTICUT

The NATION'S SCHOOLS

**they like to save money
in Ontario, too!**



Wayne Central School, Ontario, N. Y.

**... so Wayne Central School
makes its money go further with
DUNHAM VARI-VAC HEATING**

Like so many others, the Ontario, N. Y., School Board wanted the most comfortable heating it could buy... at the least possible operating cost. So they chose Dunham Vari-Vac®—a versatile heating system that has proved time and again in installations located in *every* climate zone, that *fuel savings as high as 40%* are not at all uncommon.

Dunham Vari-Vac can cut your fuel costs because it uses far less steam to balance heat supply with

demand. With Dunham patented temperature controls on high-vacuum steam mains, outside weather and inside heat losses *promptly* and *automatically* regulate steam consumption. What's more, you can "zone heat" with Vari-Vac to meet varying conditions of building exposure and occupancy.

There's far more to both the comfort and cost-saving features of Dunham Vari-Vac. All the facts are yours, if you clip and mail the coupon.



DUNHAM

VARI-VAC HEATING

**RADIATION • CONTROLS • UNIT HEATERS
PUMPS • SPECIALTIES**

QUALITY FIRST FOR OVER FIFTY YEARS

C. A. DUNHAM COMPANY • CHICAGO • TORONTO • LONDON

C. A. DUNHAM COMPANY
Dept. NS-3, 400 W. Madison St.
Chicago 6, Illinois.

Please send your new Vari-Vac Literature.

Name _____
Firm _____
Address _____
City _____ Zone _____ State _____

What's New ...

Improved Adding Machines Are Quiet and Efficient

Designed to make figure work easier and so increase efficiency, National's Deluxe series of adding machines is equipped with many new features. The "Live" Keyboard operation, in which figures add and print instantly as they are set up, has been improved with personalized touch control. Insulation of the machine makes for more quiet operation and a new mechanism permits three different ways of repeatedly adding or subtracting the same numbers. Other features include the ability to add numbers without printing any figures except the answer, easy-to-read answer dials, and a switch control for single or double spacing. The National Cash Register Co., Dayton 9, Ohio.

For more details circle #888 on mailing card.

Folding Table Has Many Uses



Heavy duty 20 gauge steel channel frame with Wenger one-piece friction brace for safe operation are features of the new Wenger folding table. It is suitable for a variety of uses in classrooms, lunchrooms and wherever table space is needed. It folds easily and can be stored flat or on edge.

A hard Melamine plastic surface encases the top, sides and bottom of the 13 ply silver birch plywood top which is marproof, stainproof and scratchproof. The table is six feet long, 30 inches wide and 30 inches high and folds into a thickness of 2 3/4 inch for storage. Wenger Music Equipment Co., 50 Wenger Bldg., Owatonna, Minn.

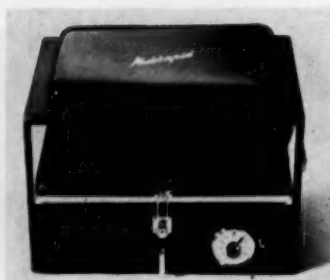
For more details circle #889 on mailing card.

Copying Machine Handles Books or Papers

Anything that can be held against the glass, including books and other bulky material, can be copied with the new Photorapid Compak. The unit can also be used to make transparencies for use as masters with diazo or blueprints or for burning in positive offset plates.

The compact, portable unit is easy to clean as the developing tray lifts out for simplified cleaning and closes tight when not in use. The non-metallic tank protects against corrosion and the machine

(Continued on page 204)



operates with only one dial to turn. It is available in two sizes for desk-top operation. Copy-Craft, Inc., 105 Chambers St., New York 7.

For more details circle #890 on mailing card.

Book Truck of All-Steel Construction

A new all-steel book truck has been introduced with readily removable shelves. It is designed for many jobs and is equipped with six 8 inch bracket-type shelves each 36 inches long. They are held in slotted supporting uprights and are adjustable to any desired vertical spacing at one inch intervals. The truck is readily and easily mobile with two fixed and two swivel casters, all with five inch rubber tires. W. R. Ames Co., 150 Hooper St., San Francisco 7, Calif.

For more details circle #891 on mailing card.

NORRIS WAS AND IS THE FIRST Milk Dispenser



What better testimony can there be to NORRIS's engineering accomplishments than the fact that all, yes all, single service tube Milk Dispensers are patterned after NORRIS? Why? Because: NORRIS provides:

- GREATER ECONOMY
- GREATER EFFICIENCY
- GREATER CONVENIENCE

Profit minded food service operators specify NORRIS MILK DISPENSERS . . . they know they can depend on NORRIS for profit performance . . . service savings.



**Norris
DISPENSERS INC.**

NS355 2720 Lyndale Ave. S. Minneapolis 8, Minn.

Show me how a Norris Dispenser can help me save more . . . profit more!

Name _____

Company _____

Title _____

Address _____

City _____

State _____

NR355

CLEANS EVERYTHING BETTER

*New
Improved
Detergent*

REVOLUTIONARY NEW KLEER-MOR WITH CHELATING AGENTS

Only the new Kleer-Mor with chelating agents added has these sensational detergent properties:

- Dust-free, non-irritating, non-caking
- Makes all water soft as rain
- Stepped-up concentration for greater cleaning power
- Plentiful long lasting suds

Super-powered for hand cleaning of pots, pans, glasses, dishes



KLENZADE

Other Important Institutional Uses
Dining room service, silverware, fixtures, refrigerators, storage bins, woodwork, tile, windows, walls and ceilings. Write for free manual, "Modern Sanitation Practices".

KLENZADE PRODUCTS, INC.

Branch Offices and Warehouses Throughout America

KELOIT, WISCONSIN

The NATION'S SCHOOLS

Nyco Display Rail

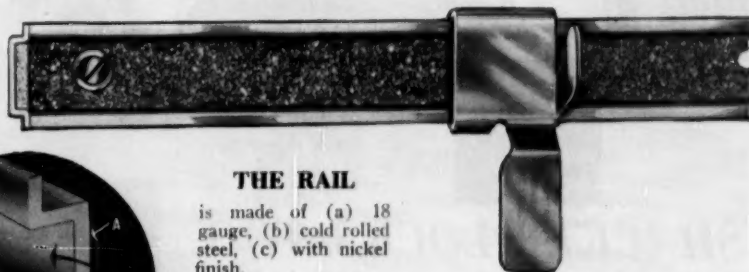
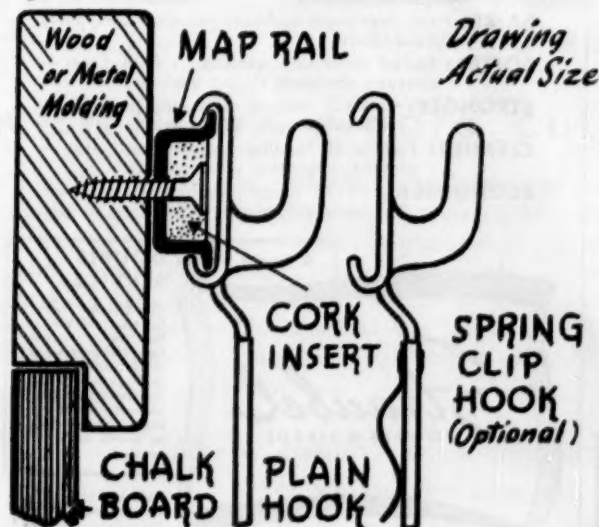
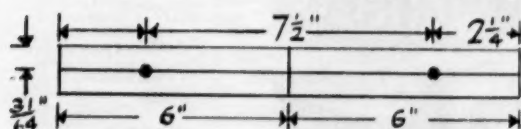
Has These Features

NYCO DISPLAY RAIL provides an easy, convenient way to display maps and charts (singly or in sets), also small pictures and seat work. Maps of any width can be hung from the Nyco Display Rail. The steel hooks slide easily to any position and are strong enough to hold a set of maps in a case. It is easily attached to the chalkboard moulding of a new or old building. The ¼-inch cork inlay is a veritable bulletin board.

PRICES

	No. 90 Cork Lined	No. 91 Without Cork
Rail		
Less than 100 feet. Per foot.....	\$0.45	\$0.34
100 to 500 feet. Per foot.....	.42	.32
Over 500 feet. Per foot.....	.39	.30
Hooks		
No. X900. Plain Hook. Each.....	17c	
No. X910. Spring Clip Hook. Each.....	22c	

SPECIFICATIONS



THE RAIL

is made of (a) 18 gauge, (b) cold rolled steel, (c) with nickel finish.

THE CORK STRIP

has a burlap backing. The strip always fits tightly.

THE BRASS EYELETS

in every screw hole prevents screws from cutting through the cork.

THE TABBED HOOK

holds single spring roller mountings in upright position—necessary if spring roller is to function properly.

No. 90 Nyco Display Rail, Cork-lined

18 gauge cold rolled channel steel, copper under-coating and finished in dull nickel. Lower edge of rail notched at intervals of approximately two feet to permit insertion or removal of hooks. Width of rail one inch. Available in 3, 4, 5 and 6 foot lengths.

Cork inlay ¼ inch thick and ¾ inch wide, burlap backed to run continuous length of rail.

Screw holes provided with nickel plated, counter sunk collars. Cork inlay available in either tan or green.

No. 91 Nyco Display Rail, Without Cork

No. X900 plain hook, 18 gauge steel, nickel finish. Constructed to grip the rail tightly when weighted with a map and to slide easily when weight is released. Projecting tab to insure proper operating position of maps mounted on spring rollers and to protect chalkboard moulding.

No. X910 spring clip hook same as No. X900 but equipped with spring clip on projecting tab.

Both hooks will fit either No. 90 or 91 rail. It is customary to order two hooks for each four feet of rail.

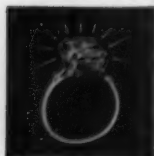
A. J. NYSTROM & CO.

3333 Elston Ave.

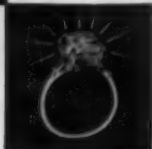
Chicago 18, Ill.

THESE RINGS LOOK ALIKE...

but what a difference in value

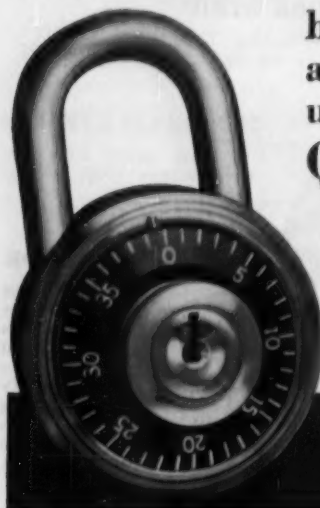


One stone is a genuine blue-white diamond... famous for its quality and flawless cutting. The other is a much cheaper stone... due to several imperfections. A casual glance indicates a similarity between the two. A detailed inspection proves their difference in value.



SHACKLE LOCKS, TOO, MAY LOOK ALIKE...

but only one assures the ultimate in **QUALITY**



NO. 68-264
MASTERKEYED

NATIONAL LOCK combination locks

these unseen quality features prove the difference in National Lock value

- Soundly engineered
- Sturdy construction throughout
- Brass working parts
- Stainless steel outer case
- Extra strong shackle
- Self-locking feature
- Chromium plated shackle, box, plug, knob
- 3-number dialing
- Chromium plated cylinder
- Simplified lock-record charts

(Leatherette binder FREE with orders of 100 or more locks)



**write on your letterhead
for a FREE sample lock**

NATIONAL LOCK COMPANY

Rockford, Illinois • Lock Division



INTERFOLD

ALCOVE

OR

ROLL

Straubel Tissues

**SET THE TREND IN QUALITY
SERVICE AT ECONOMY COSTS**

all washrooms can afford!



"Convenience Cut" roll
tissue dispenses but two
sheets at one time.



There's less irritation—and more user satisfaction with Straubel washroom tissues. Available in single or double service Alcove recessed and Texturized Roll tissues—bleached white or natural. In white sulphite Interfold tissue—singlefold, doublefold and 4 1/4" x 9".

SAFER: Pure, clean paper sanitarily processed completely by machinery.

SOFTER: Special processing treatment softens fibers—increases absorbent drying qualities.

STRONGER: Specially treated, extra long paper fibers eliminate easy break-through.

CLEANER: Full label banding keeps tissues clean—protects them from dust and dirt.

ECONOMICAL: Fewer tissues required—greater absorbency reduces waste. Low in cost.

A Single Source DOUBLE SERVICE



Use Straubel hand towels, too! White Sulphite or Texturized bleached white or natural—singlefold or multifold. Quicker drying absorbency saves money because fewer towels are required.

Sold only through reliable Distributors of Paper Products. Write for dealer's name best located to serve you.

STRAUBEL PAPER CO. • GREEN BAY • WIS.

The NATION'S SCHOOLS



from the **principal's** office



to the **classroom**

KENFLEX floors cut maintenance costs

Where school floors must be durable and colorful, KenFlex is the answer. And if you're trying to stretch operating dollars, KenFlex is a "must" for low maintenance costs.

That's because low upkeep, along with good looks, is built right into each KenFlex vinyl asbestos tile. KenFlex's smooth vinyl surface withstands spilled fats, oils, drugs, alcohols and foodstuffs. Quick damp mopping is all it

needs. Tough asbestos fibers give KenFlex long life under the heaviest school conditions. Yet KenFlex costs *less* than many floors that soon become pitted and scratched, and increasingly expensive to maintain. Get full details on KenFlex and other Kentile, Inc. Floors from the Kentile Flooring Contractor listed under FLOORS in your Classified Phone Book, or write Kentile, Inc., Brooklyn 15, N. Y.

*Made by America's largest manufacturer
of resilient floor tiles*

KENFLEX
VINYL ASBESTOS TILE®

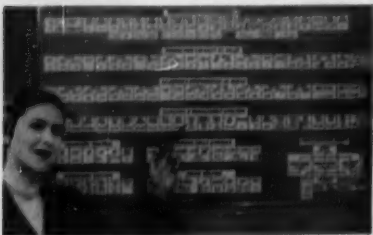
REG. U. S. PAT. OFF.

KENTILE * KENCORK * KENRUBBER * KENFLEX * KENFLOR *

What's New ...

Flexi-Trol Board Gives Facts At a Glance

The Flexi-Trol Visual Control Board is designed to give at a glance all the facts in any situation in the school



office, supply room, store room or other area requiring schedules, records, student analysis, inventory control and routing, organization charts, honor rolls or other control charts. Records maintained on the "Flexi-Trol" board cannot be lost or misplaced. All persons consult the same record and greater efficiency and savings of time and money are possible with the system which is easily set up and operated.

On the "Flexi-Trol" Control Board are 25 horizontal columns and 26 vertical columns, providing a total of 650 slots to accommodate the minimum sized card. Three other sizes of larger cards may also be used. Information may be written or typed on the cards which are provided in strips for easy typing and

can be supplied in any of five colors to allow for segregation of the recorded information. No skill is required to handle the board.

The standard size "Flexi-Trol" is 42 inches wide and 24 inches high. A steel sheet permanently riveted to a Masonite backboard is framed in polished aluminum and spray painted gray. It is equipped with hanging hooks which can be folded away when the board is being used on a table. Special sizes can be made to meet any particular problem. Methods Research Corporation, 442 Mosel Ave., Staten Island, N.Y.

For more details circle #892 on mailing card.

Double-Wall Panels of Architectural Porcelain

Two types of Davidson Double-Wall Panels have recently been announced. Constructed of architectural porcelain, the panels can be used in any fenestration or spandrel system of curtain-wall design. Type A Panels are manufactured in sizes up to 12 square feet, from 1½ to 3 inches thick. Fiberglass insulation is used. Type C Panels are produced up to 20 square feet in size with minimum thickness of 2½ inches. Special shrink-proof gypsum-base Vitrock backing is used in addition to the fiberglass and air space for rigidity and additional sound insulation.

Architectural porcelain fused to steel makes the outer face of the panels with baked prime paint finish or porcelain enamel on the inside panel face. Aluminum, stainless steel or galvanized metal can be furnished as the finish. The panels are available in rippled, two-color, smooth, matte and luster effects. Walls of Davidson Double-Wall Panels are light in weight, can be erected swiftly and can be erected from inside. Davidson Enamel Products, Inc., 1100 E. Kibby St., Lima, Ohio.

For more details circle #893 on mailing card.

Globe Building Kit Stimulates Interest in Geography

The "do-it-yourself" trend is exemplified for elementary and junior high pupils in the "Construct-A-Globe" kit. Interest in geography is stimulated as the pupils assemble the globe from flat segments and study each country as they do so. The finished globe is 10½ inches in size, printed in three colors and is easily assembled.

The kit includes global segments pre-cut for easy assembly, base and axis rods for mounting, adhesive "locators" used for playing geographic games, a "comparator" for visual comparison of global surfaces, a scale for measuring global



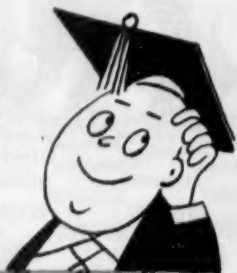
distances both in miles and in flying time, and a 26 page Handbook and Teachers' Manual. Models of Industry, Inc., 2100 Fifth St., Berkeley, Calif.

For more details circle #894 on mailing card.

METALAB means a PROFESSIONAL SCIENCE CLASSROOM

1. Does your school equipment meet the standards your students will find in the industrial world?
2. Does your school laboratory equipment have the modern, functional design to fit within your school building?

"Custom-Built" METALAB equipment using modern mass production methods result in a completed laboratory produced well within your school budget.



Questions like these must be answered before you build a new lab. Find out today how Metalab gives you all the right answers plus lower initial costs and easier maintenance. See the complete line of Metalab's exclusive sectional lab units... the same quality equipment used by America's leading industrial firms.

A request on your letterhead will bring you this free 180-page catalog and manual—write today!



Metalab engineers in principal cities will assist with plans and estimates. No obligation.

SECTIONAL LABORATORY FURNITURE AND EQUIPMENT BY
METALAB Equipment Corp.

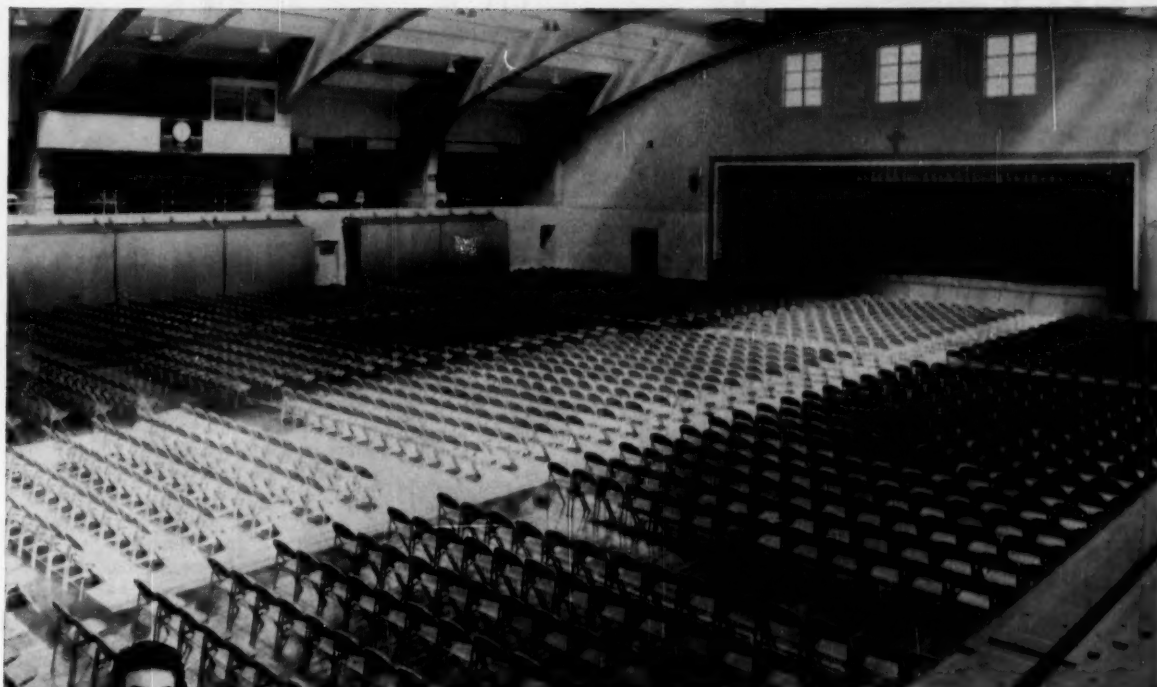
256 DUFFY AVE., HICKSVILLE, L. I., N. Y.

TDC Schoolmate Is Multi-Purpose Projector

The new TDC Schoolmate multi-purpose slide and filmstrip projector meets the highest standards for bright illumination, cool operation and maximum versatility. Available in 300 and 500 watt models, the Schoolmate will accept single and double frame filmstrips and two by two inch slides in any standard mount. A scratchproof film takeup receptacle and ceramic guide rails to feed film accurately without allowing the picture area to come in contact with the filmgate are other features of the projector. Three Dimension Co., Div. of Bell & Howell, 3512 N. Kostner Ave., Chicago 41.

For more details circle #895 on mailing card.

(Continued on page 206)



McDonough Memorial Gymnasium, Georgetown University, D.C.

school audiences appreciate these comfortable folding chairs!



No. 54
folding chair

Students, faculty, and P. T. A. members unite in praise of American Seating Folding Chairs—the chairs designed for comfort, to eliminate squirming. Extra wide body-fitting seats and restful back panels assure easy sitting and relaxed listening. Durability, safety, and convenience

are other reasons why these chairs outnumber all others in school use. Ample braced steel tube construction—no tipping or pinching hazards—quiet-folding, and quiet in use. Unconditionally guaranteed in normal use, by the World's Leader in Public Seating.

FOUR POPULAR SEAT STYLES

No. 60 has wide, deep-spring seat, upholstered in washable Dupont Fabrilite.

No. 54 has formed birch seat.

No. 53 has shaped steel seat.

No. 56 has imitation-leather upholstered seat.

CAN BE GROUPED EASILY

Bar clamps lock American Seating Folding Chairs in groups of 2, 3, or 4 chairs, 1" apart, for quick alignment in large installations.

Steel threshold locks ends of rows, separating rows 30" back to back. Available in sections to accommodate 3 or more rows.



Book rack (fits these chairs only)—Snaps over rear cross braces; holds books up to 1 1/4" thick.



Storage trucks—Four styles for general or understage use. Swivel casters; removable handles.

American Seating Folding Chairs

OVER 11 MILLION NOW IN SERVICE!

MAIL THIS COUPON TODAY

American Seating Company

Dept. S-F, Grand Rapids 2, Michigan • World's Leader in Public Seating

- ☐ Please send your latest brochure on AMERICAN SEATING FOLDING CHAIRS
☐ I am interested in _____ (quantity) ☐ No. 60 Deep-Spring upholstered seat
☐ No. 54 Birch seat ☐ No. 53 Steel seat ☐ No. 56 Imitation-leather upholstered seat

Name of school or church _____

Street _____

City and Zone _____

State _____

Individual and title _____

What's New ...

Redesigned Collar for Fin-Tube Heaters

A new deep-drawn fin collar has been developed by Kritzer as part of a re-tooling program. The new collar provides more intimate surface-to-surface contact between the fins and heat carrying tubes in the company's baseboard and fin-tube products. **Kritzer Radiant Coils, 2901 Lawrence Ave., Chicago 25.**
For more details circle #896 on mailing card.

Classroom Versatility Increased With Chair-Desk

Steel tubing and hardwood plywood are combined to form the new DC1



Chair Desk. Correct posture design, book rack and easy ingress and egress are in-

corporated into the unit. Seat, back and desk top are of resin bonded hardwood plywood finished for durability and ease of maintenance. The steel tubing frame is bronze welded for stability and chair legs are equipped with case hardened steel rubber cushion glides to prevent damage to floors. **Seats & Desks, Inc., 218 S. Wabash Ave., Chicago 4.**

For more details circle #897 on mailing card.

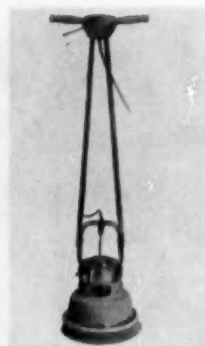
Wax-Base Finish Protects Terrazzo Flooring

Protection against water, stains and dust is offered in Terra-New Terrazzo Seal. This new wax-base finish is designed to protect terrazzo, marble and ceramic tile floors. Heavy traffic areas can be touched up as needed and blended in with the finish on the rest of the floor. The finish is colorless and provides a high gloss without slipperiness. One gallon covers approximately 1500 square feet and the product is available in 1, 5, 30 and 55 gallon drums. **S. C. Johnson & Son, Inc., Racine, Wis.**

For more details circle #898 on mailing card.

Floor Machine Handle Increases Use

The new three-way handle on the Advance Gyro 12 Floor Polishing and



Scrubbing Machine gives the unit greater versatility. It handles as easily as a home type vacuum cleaner when the handle is in the "free" or "floating" position. The safety switch and balanced design make it possible for unskilled help to use the machine effectively.

The Gyro 12 operates as a conventional self-propelling floor machine with the handle locked and moves back and forth across the floor as the handle is raised and lowered. With the handle locked in the vertical position the machine tilts back for easy transport to storage or to place of use. It can be stored in minimum space. **Advance Floor Machine Co., 2613 Fourth St. S.E., Minneapolis 14, Minn.**

For more details circle #899 on mailing card.

(Continued on page 210)

NACO

**DRY HEAT
FOOD TABLES
ELIMINATE
STEAM AND
WATER PANS
FOREVER**

Naco takes the nuisance out of food service. No more scalding steam. No more bulky water pans to fill and clean. No more buckets to empty. This is Naco "dry" heat, and it's the quick, clean, modern way to keep food hot and fresh with less shrinkage. Each compartment is individually controlled by a hi-med-lo valve and separated by an insulated partition; body of table insulated with 3/4" Fibreglass. Food space is generous. Operating cost uncommonly low. Quick and easy to clean. Stainless steel or hammertone finish. Electric or gas units. Write today for literature.



ATLAS DIVISION
National Cornice Works
1323 Channing Street
Los Angeles 21, California

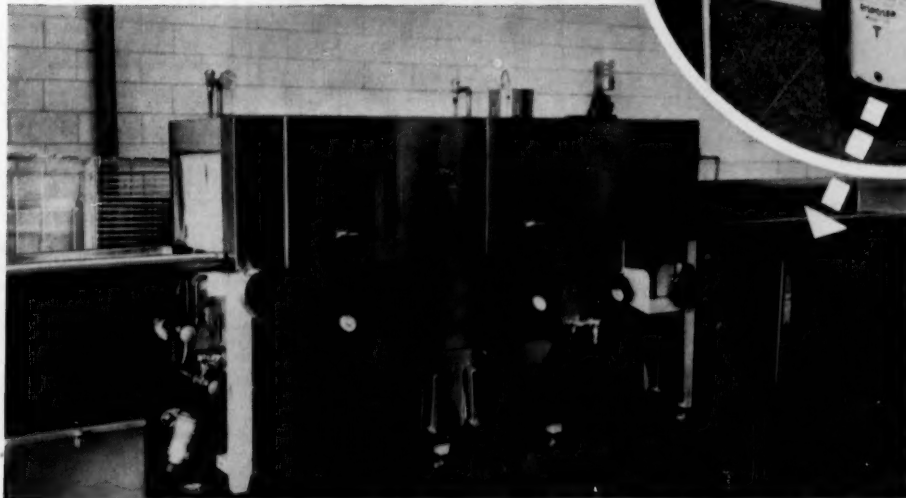


Two Ways to Cut Kitchen Costs with TOLEDO



FOOD WASTE DISPOSER

"Reverso-CLEAN" action. Shreds food wastes, flushing these down the drain; fast, continuous feed. Motor reverses each time switch is turned on or when under extra load. Easily installed in standard opening, or may be equipped with cone, scrapping block, and silver guard.



FAST . . . EFFICIENT CONVEYOR PRE-WASH

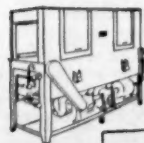
All of the features of Toledo conveyor dishwashers, plus an efficient conveyor pre-wash—combined in one machine. Your choice—(1) *Fresh Water Pre-Wash* operates directly from fresh water line. (2) *Recirculating Pre-Wash* with powerful 1 H.P. pumped pre-wash operation . . . final rinse water fed to pre-wash tank and recirculated for maximum hot water economy.



DISPOSER

Again—Toledos get the call for modern labor-saving dishwashing and food waste disposal—to *reduce kitchen costs!* This new Toledo Dishwasher combines in a single, dual-speed automatic machine a new, efficient conveyor Pre-Wash along with performance-proved Toledo wash and rinse operations. Conveyor carries dishes through pre-wash, wash and rinse.

Fast, easy, sanitary disposal of food waste is obtained with the new Toledo Disposer which has Reverso-CLEAN Action . . . self-cleaning, as shredder reverses automatically on each use, or under extra load. Check your needs . . . control costs with Toledo's complete selection of Dishwashers and Food Machines for all restaurant and institutional needs. Send for bulletin 100-J.



DISHWASHERS



TOLEDO SCALE COMPANY

Rochester Division
245 Hollenbeck St., Rochester, N. Y.

It pays . . . Go TOLEDO[®] all the way!

PEELERS



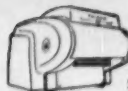
SAWS



SLICER



CHOPPERS



STEAK MACHINES



TOLEDO
DISHWASHERS
BEAR THIS
SEAL OF
APPROVAL

The 9 Key Features sought-after in
Folding Tables . . . all combined by

metwood

1. Folds & Unfolds Quickly
2. Extruded Aluminum Moulding
3. Automatic Positive Lock
4. The Strength of Steel
5. Resist heat, acid, stains
6. Tempered Masonite Top
7. No Knee-Interference
8. Stacks & Stores in minimum space
9. Choice of Other TOPS

Write for Free Catalogue
of Adaptable Folding Tables

metwood mfg. co.
hanover, pa.

Automatic CLASSROOM SIGNALS at LOW COST

Montgomery PROGRAM TIMERS

- Stop button pushing!
- Assure punctuality!
- Cost little!

EASY TO INSTALL — EASY TO OPERATE

Montgomery Program Timers cost as little as \$86.25 and may be installed by your school electrician. Easily set to any schedule, fully automatic, but permit manual operation for special signals.

MONTGOMERY MFG. CO., OWENSVILLE, IND.

See
Your
Dealer
or
Mail
Coupon
Today!

MONTGOMERY MFG. CO.
Owensville 6, Ind.

Please send data on Montgomery Program Clocks.

Name.....

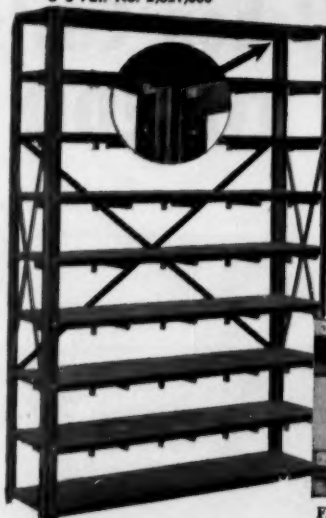
School.....

Address.....

City & State.....

NEUBAUER *Gym* "TWIN-POST" BASKET RACK

U S Pat. No. 2,621,800



Rigid Corner Posts— Safer Recessed Hasps

The Neubaer "TWIN-POST" corners are actually 2 posts with 3 strong corners (see inset circle). They keep the whole basket rack rigid and in line.

Note below how dividers guide and separate baskets and how hasp and padlock are neatly recessed inside shelf edge. Eliminates danger of cuts and bruises.



We also make Neubaer "Twin-Post" shelving in range of sizes. Write for literature.

FREE ESTIMATES — Neubaer gym Basket Racks are made in capacity desired for any size basket and can be equipped with casters. Olive green or airline grey. Special colors available.

Inquiries invited from school supply dealers.

NEUBAUER MFG. CO.

2027 Central Ave.
Minneapolis 28, Minnesota

ALLIED'S best buys in RECORDING EQUIPMENT

only
\$97.45



SAVE ON QUALITY RECORDING TAPE



Knight Plastic Tape

Noted for clean reproduction, wide response, low distortion and uniform output. 1/4" plastic base; bonded red oxide coating; Type "A" (inside coated); transparent plastic reels. The best for less.

96 R 698, 5", 600-ft. reel.
Only.....\$1.37
96 R 699, 7", 1200-ft. reel.
Only.....\$2.10

ALLIED stocks leading makes of tape recorders and complete lines of recording tape, components and accessories. See our Catalog for complete money-saving selections.

Knight **PUSH-BUTTON** Automatic Tape Recorder

Judged "Best Buy" among recording experts and educators. Features unique Push-Button Keyboard for instant recording with remarkably faithful reproduction. Has 2-speed dual-track recording mechanism and efficient erase system. Records up to 2 hours on a single tape. For instant playback, just push a button; also has push-button control of forward, reverse and stop functions. Records with excellent fidelity from microphone, radio or phonograph. Plays back through built-in amplifier and high-quality speaker. Simple to operate. Compact, attractive. Complete with microphone, 600-ft. reel of tape and take-up reel. Shpg. wt., 29 lbs.

96 RX 675, KNIGHT Recorder. Only...\$97.45



**FREE 308 PAGE
1955 CATALOG**

Send for the leading buying guide to everything in electronics for the school: Sound and Recording Apparatus, Training Kits, Lab Instruments, Tools, Books, Electronic Parts, etc. Write for FREE copy today.

ALLIED RADIO
100 N. Western Ave., Dept. 10-C-5
Chicago 80, Ill.

How to provide quiet service in a busy cafeteria!

The owners of the L-C Cafeteria, Houston, Texas report a 65% reduction in noise since a J-M Variety Drilled Fibretone Ceiling was installed. Customers dine in quiet comfort—enjoy the more attractive surroundings provided by this modern acoustical ceiling.



Johns-Manville

FIBRETONE ACOUSTICAL UNITS

reduce disturbing noise at low cost

● Because distracting noise is so harmful to efficiency in any activity, practically all new building specifications include acoustical ceilings for sound absorption. However, just because your present building was constructed before sound control became an established science, there is no reason for you to be handicapped by noise. You can have a Johns-Manville Fibretone® Acoustical Ceiling quickly installed over your present ceiling.

Johns-Manville Fibretone offers an acoustical ceiling which is highly efficient, modest in cost and decorative in appearance. Uniform Drilled Fibretone consists of 12" square panels of sound-absorbing materials in which hundreds of small holes have been drilled. These holes act as

"noise traps" where sound energy is dissipated.

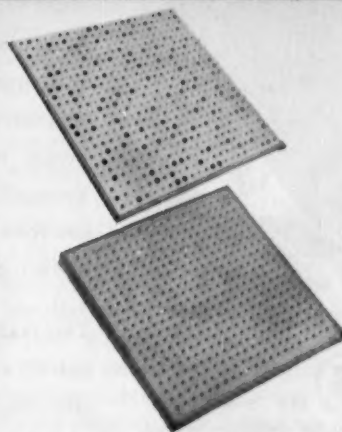
Variety Drilled Fibretone, recently developed by Johns-Manville, offers a new and pleasing effect in acoustical ceilings. The hundreds of small holes vary in size . . . create a distinctive, appealing ceiling design.

Both Uniform and Variety Drilled Fibretone units are predecorated, can be painted and repainted, and are available with a flame-resistant finish.

For a complete survey by a J-M acoustical expert, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. NS, New York 16, N. Y. In Canada, write 565 Lakeshore Road East, Port Credit, Ontario.

*Reg. U. S. Pat. Off.

Johns-Manville



Variety and Uniform Drilled Fibretone units are easily installed over new or existing construction. Hundreds of small holes drilled into the sound-absorbent panels increase acoustical efficiency.



40 years of leadership
in the manufacture of
acoustical materials

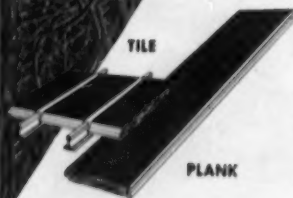


Tectum[®]

ROOF PLANK .. TILE

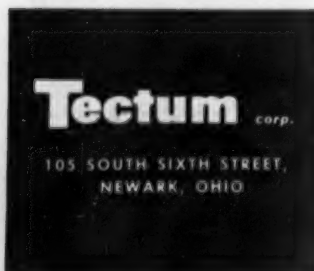
Why coddle your eyes—yet neglect your ears and irritate your nerves, when you can quiet noise and confusion without cost?

At no cost? Yes, because all other essentials of a superior roof deck—textural, insulative, non-combustible, structural, stable, light weight, termite and fungus proof—are in Tectum[®]. Up to 85% of noise and clatter is absorbed and quieted by exposed ceilings of Tectum Roof Plank or Tile.



SEE IT NOW!

Ask for sample and catalog, or refer to Section Tc/2e, Sweet's Architectural File.

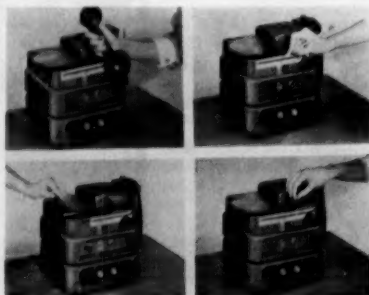


TECTUM CORP.
Dept. #110, 105 S. Sixth St., Newark, Ohio
_____ Send sample and catalog.
_____ Send sample only.
Name _____ Title _____
Company _____
Address _____ City _____ State _____

What's New ...

Phone Dictation System at Low Cost

The New PhonAudograph III is a telephone dictation system providing efficient service at reduced cost. It is a combination recording-transcribing unit developed for use in a central dictation system. Advances in the science of ap-



plied electronics have been utilized in every element in the system, resulting in considerable reduction in costs.

The method utilizes a single centrally-located recorder, to which may be connected from one to twelve dictating instruments, similar to the standard telephone handsets. The "Add-a-Unit" plan provides for expansion of the system by the use of additional recorder-transcriber units.

The system is designed for use by a group of dictators using handsets for dictating into the central machine. Users are assured of privacy when dictating and when giving instructions to the attendant. A signal system indicates when the recorder is available and a push button system permits the dictator to indicate his desire to use the machine. The new system supplements other equipment manufactured by the company and can be used by a single dictator or by a group. **The Gray Manufacturing Co., 16 Arbor St., Hartford, Conn.**

For more details circle #900 on mailing card.

Hot Chocolate Drink Made Instantly

A continental style hot creamed cocoa drink is available for instant preparation with hot water. Known as Brown Swiss, it is processed from pure cream, milk solids and the finest quality cocoa. Instantly soluble, Brown Swiss is prepared by the addition of hot water only and provides a nourishing hot drink which has an excellent flavor and the quality of hot chocolate made with whole milk or cream. It is supplied in cases containing three hundred 1 1/4 ounce envelopes, each making one cup; twenty-four 15 ounce tins, each tin making 12 cups, or six #10 tins, each tin making 2 1/2 gallons. All sizes are gas packed in air tight containers to ensure freshness. **Webster Van Winkle Corporation, Summit, N.J.**

For more details circle #901 on mailing card.

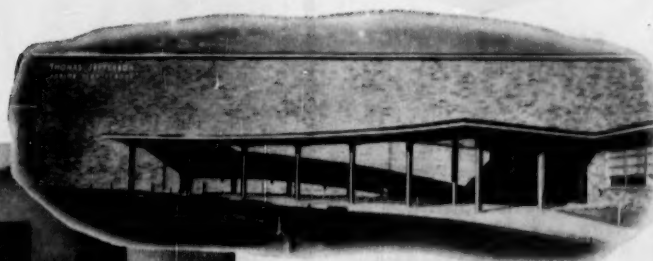
(Continued on page 212)

Adaptable, Economical



The ORIGINAL Tubular
Steel School Furniture

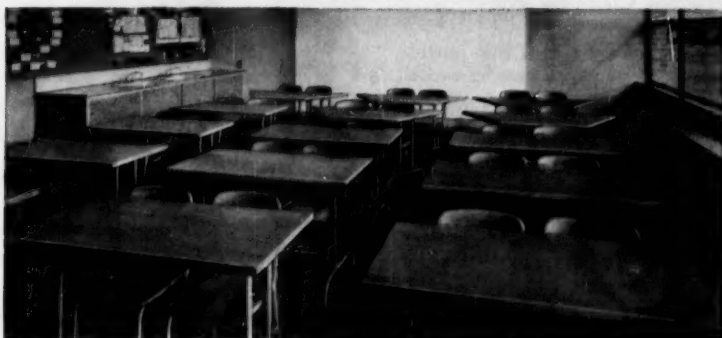
Extra Quality* Heywood Furniture Throughout New, Low Cost THOMAS JEFFERSON JUNIOR HIGH



AUDITORIUM—with 785 seating capacity has Heywood's comfortable TC 705 chairs



SCIENCE LABORATORY—is equipped with Heywood's S 962 tables and all-purpose chairs



CLASSROOM—here again versatile S 962 tables and all-purpose chairs are used

When Dr. E. C. Grover, Superintendent of Schools, Fairlawn, New Jersey, planned the new Thomas Jefferson Junior High School, his limited budget had to be stretched to meet the needs of a rapidly growing school enrollment. Heywood-Wakefield Tubular Steel School Furniture's versatility, strength and exceptionally low maintenance cost met the exacting requirements . . . and was installed throughout this school and the new, modern Lyncrest Elementary School in Fairlawn, as well. Arthur Rigolo was the architect for both of these fine new schools, and installation of Heywood-Wakefield School Furniture was carried out with the assistance of M. J. Franz, representative of Heywood-Wakefield Company, One Park Ave., New York.

*Some of the *Extra Quality* features you get in Heywood-Wakefield Tubular Steel School Furniture: all joints of welded steel; super-silent glide chairs; scientifically designed saddle seats; and patented lids that hold open and permit quiet closing. For further information on the *EXTRA QUALITY* features of Heywood School Furniture, write for free catalogue. Heywood-Wakefield, School Furniture Division, Menominee, Mich.; Gardner, Mass.

What's New ...



**END RECURRING
TOWEL EXPENSE**

Forever

by installing

NATIONAL

HAND DRYERS!

Never Again

**COSTLY WASHROOM
MAINTENANCE . . .
TOWEL LITTER**

ALTON, ILL. BOARD OF EDUCATION installed 25 National Hand Dryers. They actually tested and carefully checked 4 of these dryers installed in a washroom in the Senior High School and report a savings of \$116.28 per month from these 4 units.

NORTHWESTERN UNIVERSITY has installed over 70 National Hand Dryers, providing automatic 'round-the-clock towel service . . . ending complaints about empty towel containers . . . eliminating a potential fire hazard.

NATIONAL HAND DRYERS are vandal proof. They are designed and constructed to meet conditions of extreme abuse.

LEARN HOW YOU CAN SAVE 85¢ OUT
OF EVERY MAINTENANCE DOLLAR.
No obligation, of course.

**Mail This Coupon
Today**

NATIONAL DRYER SALES CORP. Dept. 13
616 West Adams Street, Chicago 6, Ill.
Send me the facts, cost comparison of
towers vs. National Hand Dryers, Public
Health Service Reports and descriptive literature.

Name _____ Title _____
Company _____
Address _____
City _____ Zone _____ State _____

Typing Tester Improves Speed

Weaknesses in the student's technic in typing are brought out by the use of the Adler Typing Tester. It provides a method of showing the student by his own work why he does not gain speed, thus assisting the instructor to help in overcoming the faults. The machine operates by means of an electric motor



which carries a tape in front of the ribbon. After typing a few lines, the tape is inserted in a specially designed ruler to calculate the speed.

The Typing Tester is fitted to the cowl of the typewriter which may also be used as a regular machine when not needed for testing. One tester may be used for several students as only a short test is required to discover the problems. The Tester comes with a carrying case. Gramont Corporation, 2756 Rowena Ave., Los Angeles 39, Calif.

For more details circle #902 on mailing card.

Resin Glazing Sheet Is Shatterproof

Designed for use where the danger of breakage is a factor and where shatterproof safety is important, Resolite Glazing Flat is smooth and translucent, without surface pattern. It can be used for windows where transparency is not wanted and for greenhouses and similar glazing. The product is factory cut to required sizes up to 38 by 12 feet, in all eight standard Resolite colors and in semi-clear. Resolite Corporation, Zelienople, Pa.

For more details circle #903 on mailing card.

Institutional Cleaning Pads for Kitchen Utensils

Brillo Soap Pads Hotel Size provide a fast and convenient way to clean cooking utensils, stove ovens, grates, counters and all other metal surfaces around the large institutional kitchen. The new pad is four and one-half inches square and is impregnated with pure vegetable oil polishing soap. The combination of the sturdy metal fibers and polishing soap removes food particles and burned-on scorch at the same time grease is dissolved. Brillo Mfg. Co., 60 John St., Brooklyn 1, N.Y.

For more details circle #904 on mailing card.

Console Heaters in Wide Choice of Colors

The new Herman Nelson Console Heaters are available for a variety of uses in institutional buildings. Among the many advantages of the heaters are a removable base for wall-hung units, a new key-operated two-speed key switch that is operated through the grill, a one piece front panel for fully recessed wall or ceiling applications, and easy access to all parts. Console Heaters are offered with a basic color of Nelson grey. They are also available in seven different colors and in many two-tone designs. American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky.

For more details circle #905 on mailing card.

Shell-ice Machine for Fast Cooling Ice Chips

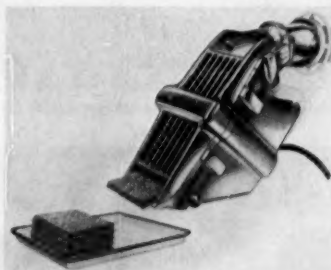
Hard, clear, dry, solid ice is produced with the new Frick Shell-ice maker. Made with ammonia or Freon under direct expansion, Shell-ice may be frozen in hollow cylinder or shell form. The pieces are irregular in size and shape for more efficient and faster cooling. The freezing cycle is adjustable and automatically controlled. Shell-ice makers are offered in 12 sizes, with capacities from 1/2 to 30 tons of ice each 24 hours. Frick Co., Waynesboro, Pa.

For more details circle #906 on mailing card.

Patty Machine Attaches to Meat Grinder

Less than a square foot of work room is required for the new award-winning Needham Patty Machine, Model No. 60, which attaches to the meat grinder. Patties, each on a paper square, are automatically extruded and ejected when the Patty Machine is attached and meat is ground. Both operations are done at the same time.

Thirty to fifty patties a minute are turned out in the machine which has no



extra parts. A thumb screw is turned for the thickness desired and patties may weigh from 2 to 8 ounces. The machine is simple in construction and design and is therefore easy to clean and operate. Needham Manufacturing Company Inc., Needham Heights 94, Mass.

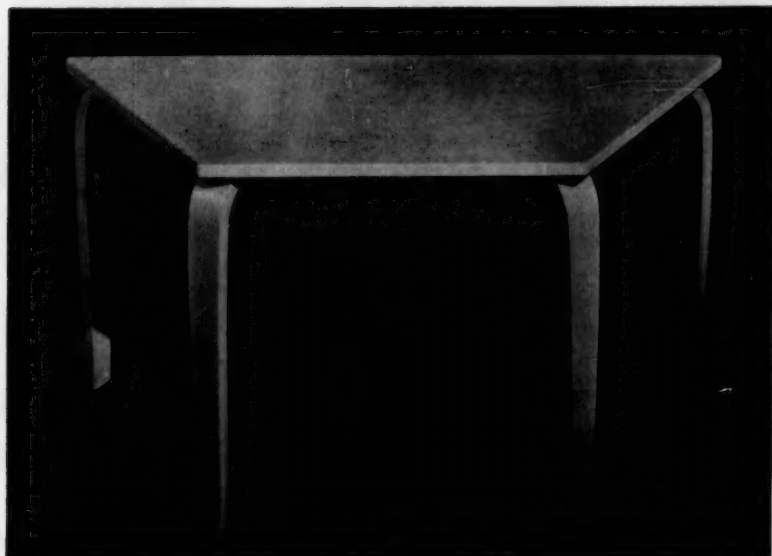
For more details circle #907 on mailing card.

(Continued on page 216)

**FOR MAXIMUM FLEXIBILITY . . .
THE NATIONAL LINE OF**

MULTI-PURPOSE FURNITURE

Meets Every Classroom Requirement



Trapezoidal Romper Table

Here is multi-functional furniture designed to meet the specifications of modern teaching techniques. It is completely versatile—easily arranged and rearranged to allow for an infinite variety of uses. Every desk and table in the National line has the Natcolite top, surfaced with Nevamar laminates in wood-grain patterns specially developed for uniform low light reflectance, and banded with matching Wynene plastic edging.

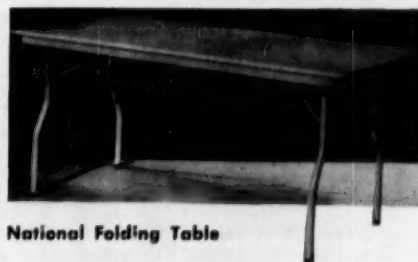
The Natcolite top withstands years of punishment and eliminates maintenance problems, because it never needs refinishing or resurfacing.

National school furniture is highly efficient and modest in cost—adaptable to any school budget.

***See our products on exhibition at the following
NEA shows: Denver, March 12; Cleveland, April 2.***



Trapezoidal Multi-Mode Table



National Folding Table

NATIONAL SCHOOL FURNITURE COMPANY

Div. of National Store Fixture Co., Inc.

ODENTON, MARYLAND



This Flexachrome Vinyl Plastic-Asbestos Tile Floor makes a wonderful basketball court for the Gunnery School, Washington, Conn.

For a floor that
scores high on every count
... specify Flexachrome!



Don't put in "substitute" flooring... when you're sure to win with Flexachrome!

Flexachrome is the ultimate in vinyl-asbestos resilient flooring. Comfortable to walk or play on. So durable and long-wearing, you'll be certain that the two "e's" in Flexachrome stand for *double economy*.

And, if you want colorful beauty, Flexachrome will give it to you the way you like it. Take your choice of 22 sharp, clear colors that won't dim with the years.

For basketball courts use 3/16" Flexachrome for added resiliency and extra wear.

In food areas you'll want Flexachrome for its *greaseproof* qualities, too... its resistance to acids and alkalis.

And this close-textured tile really gets the nod from janitors when it comes to *easy cleaning*. Simple sweeping and occasional washing is all that's needed.

So specify Flexachrome for your school... from

entrance to class rooms, from cafeteria to corridors, from library to labs.

This modern flooring will improve your school's appearance and save maintenance money year after year.

Ask your Tile-Text Contractor to give you complete information and free estimates on Flexachrome and other Tile-Text Floor and Wall Products. You'll find him listed in the classified telephone directory. Or write:

THE TILE-TEXT DIVISION, The Flintkote Company, 1234 McKinley Avenue, Chicago Heights, Illinois.

TILE-TEXT—PIONEER DIVISION, The Flintkote Company, P. O. Box 2218, Terminal Annex, Los Angeles 54, California.

The Flintkote Company of Canada, Ltd., 30th Street, Long Branch, Toronto, Canada.

*Reg. U. S. Pat. Off.

†Trademark of The Flintkote Company



TILE-TEXT... Complete Flooring Service

Manufacturers of Flexachrome*...Tile-Text*...Tuff-Text*...Vitachrome*...Holiday†...Modnar†...and Mura-Text*.



1310 stacker
10 to 15" high



K18/2
14 to 18" high



K111
12 to 18" high

K1212 chair
10 to 18" high

K801 desk
14 x 20" or 18 x 24"

engineered for long school life

school furniture . . . sturdily constructed by Thonet to stand hard use and abuse . . . designed for beauty, comfort and correct posture, and engineered* for lasting durability.

**THONET'S famous bending and molding processes eliminate troublesome glue joints.*

IN INSTITUTIONAL SEATING
SPECIALISTS SINCE 1830



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For Information On How To
Reduce Your Floor Maintenance Costs

MAIL
THIS
COUPON

WITHOUT OBLIGATION, please send information about
best way to take care of floors made of:

Approximate floor area:square feet.

Company.....

Street.....

City..... State.....

My Name..... Title..... NS-1

General

EXTRA HEAVY-DUTY MACHINES

No Matter What Your Floor Problem,

COMMERCIAL VACUUM CLEANERS

GENERAL Guarantees Complete Satisfaction!

All GENERALS are heavy-duty machines. Quiet, easy, money-saving operation—perfectly balanced! Wax! Polish! Buff! Dry Clean! Refinish! Sand! Scrub! Shampoo! Rug! Use everywhere—on wood, asphalt, tile, marble, rubber, linoleum, cork, terrazzo.

Sealed-in lubrication. Minimum brush replacement.

It's GENERAL for Maintenance-free operation. Engineered the quality way—to last!

Rug shampooing attachment available on Models 14, 16, 18.



* Regardless of your floor problem, there's an engineered GENERAL to "fit the job." Write for proof and Folder NS-1

Model K-16



Model 66

Specify GENERAL COMMERCIAL VACUUM CLEANERS for more of everything!... 1 1/4 Horsepower, 70" Water Lift, Air Volume, Speed, Economy, 1-2-3 Ease on Dry and Wet Pick-up.

WORLD'S FASTEST HOSE ATTACHING!

Ball-bearing, swivel snap attachment ends time-wasting coupling, and uncoupling nuisance. 35-foot cord goes everywhere! Powered by the perfect By-Pass Motor! Tested and approved!



General FLOORCRAFT, INC. 421 HUDSON STREET, NEW YORK 14, N. Y.

Established 1930—World's Only Mfr. of Complete Line of Floor Machines

Summa Cum Laude



THE *Heyer* CONQUEROR

SPIRIT
DUPLICATOR **\$195⁰⁰**
PLUS TAX

The Conqueror's Best in the School Field because it's the duplicator with ALL the better features for better duplicating at a price far lower than comparable machines. **Raise-and-Lower Control**—A Conqueror exclusive! Automatically centers printing on the page.

New Fluid Control—Meters exact flow of fluid to paper . . . compensates for any type paper, any atmospheric condition.

Built-in Reset Counter—(Not an extra cost item) Always in view of operator, you run exact number of copies you want.

Adjustable Pressure Control—Calibrated to insure longer runs of sharp, brilliant copies.

Other features include **Visible Fluid Supply** and **Positive Rotary Feed** . . . and on the Electric Model 76 Conqueror you have complete automatic electric push-button operation.

Now you can print 120 or more copies per minute . . . always brilliant, sharp copies of anything typed, written or drawn on the master, and you can print in one to five colors in one operation.

WRITE TODAY FOR INFORMATIVE BOOK-LET ON THE ELECTRIC AND MANUALLY OPERATED CONQUERORS

Sold by leading School Supply Dealers

THE HEYER CORPORATION

1862 S. Kostner Ave.
Chicago 23, Illinois

Quality Duplicators and Supplies Since 1903

What's New ...

Attractive Cabinets for Classroom Storage

Wood, linoleum or plastic tops are available on the new Classroom Storage Cabinets recently developed. Each cabinet has two adjustable shelves and they

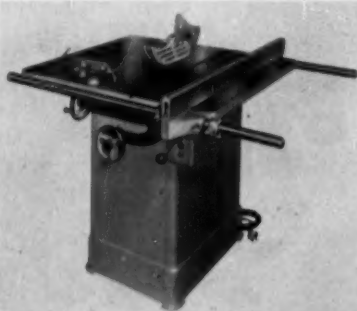


are designed for arrangement in modular fashion if desired. The cabinets are suitable for classroom and dormitory use and are available in heights for elementary or high school installation. A four inch set back at the bottom provides comfortable toe space when working at the cabinets. They are available in special construction and colors to suit the need. **Desks of America, Inc.**, P.O. Box 6185, Bridgeport 6, Conn.

For more details circle #908 on mailing card.

Heavy Duty Saw Is Safe and Powerful

A new 10 inch Tilting Arbor Saw has been developed to fill the basic needs of schools for a rugged, safe, powerful saw with capacity to handle large work conveniently with precision, accuracy and speed. The new unit was designed to incorporate improvements and advantages ordinarily found in costlier machines. It is operated from any standard one or 1½ h.p. motor. The motor mounts directly beneath table surface, away from the sawdust stream. Heavy duty trunions are extra rigid and strong for continuous vibration-free operation and the saw has adjustable gibs. The entire motor mech-



anism can be concealed by a steel shield which mounts directly to the base.

The heavy, cast iron table top has improved front and rear locking rip fence that glides easily on extended tubular guide bars. Blade tilting and raising wheels can be locked at desired settings. **Duro Metal Products Co.**, 2651 N. Kil-dare Ave., Chicago 39.

For more details circle #909 on mailing card.

(Continued on page 218)

OVER A MILLION USERS

GRAND
SAFETY

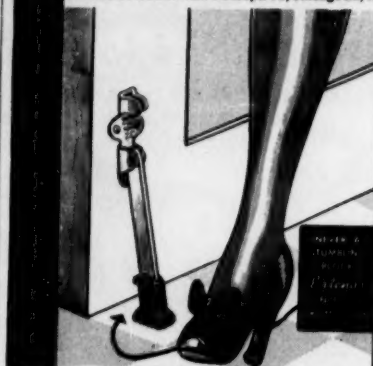
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DOOR HOLDERS

A Style and
Size for
Every Door—
Popularly Priced

The Only door holder with removable and replaceable Steel reinforced Rubber Shoes that will not mar any floor or flooring surface.

See the Complete Line of Grand Safety Door Holders on Display at your Hardware or Lumber Dealers — SEND FOR CATALOG

GRAND SPECIALTIES CO. Dept. 18, Chicago 22, Ill.



monroe
FOLDING
BANQUET
TABLES

Direct Prices &
Discounts to
Schools, Churches,
Clubs, Lodges and
All Organizations



Full line of
folding chairs



Above: Transport-
Storage Truck No.
TSC

Right: Transport
Truck No. TF



SEE MONROE TABLES And Other
Equipment At NEA Convention,
Cleveland, O., April 2-6.

MONROE TRUCKS

Transport and store your folding tables and chairs the easy, modern way with Monroe All-Steel Trucks. Each truck is designed to handle either tables or chairs. Construction of Truck No. TSC permits storage in limited space.



**WRITE FOR BEAUTIFUL
NEW CATALOG, No. 300,
PRICES AND DISCOUNTS**

THE MONROE COMPANY
76 CHURCH STREET, COLFAX, IOWA

Super Safety Cleaner

MULTI-CLEAN
Method

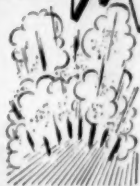
ACTIVATED

HCP



What is HCP?

HCP is the new activated chemical additive in Super Safety Cleaner that generates higher cleaning power. Developed by Multi-Clean chemists for fast, safe cleaning of all types of floors, the HCP additive powerizes the coconut oil action instantly—freeing dirt and holding it in suspension. Dirt floats away with wet pickup vacuum cleaner, floor squeegee or mop.



HCP helps free dirt and grime from floors almost instantly.



HCP helps hold dirt and grime in liquid suspension for easy removal.



HCP is completely safe for all types of floors.

CLEANS ALL FLOORS FAST! SAFELY!

Super Safety Cleaner, with HCP added, gets rid of floor dirt *fast*. But not at the risk of floor damage. **Super Safety Cleaner is safe.** Field tests have proved it is harmless to asphalt tile, rubber tile, linoleum, terrazzo, concrete, wood, magnesite and all other types of floors. **Super Safety Cleaner is economical.** Because of its high concentration, it goes more than twice as far as ordinary cleaners. Just 1½ ounces added to a gallon of water, even hard or cold water, will do almost all cleaning jobs *fast*. For fast removal of heavier wax build-ups, 8 ounces of Cleaner per gallon of water is recommended.

We Guarantee that Super Safety Cleaner, with HCP added, has been formulated from the finest ingredients under strict quality control, and when used according to directions *must* give satisfactory results.

Super Safety Cleaner with HCP is also available with germicide antiseptic added which eliminates odors and kills harmful bacteria or fungus organisms.

FREE TEST

See for yourself how Super Safety Cleaner with HCP will clean your floors. If you wish, a Multi-Clean distributor will be happy to make the test for you.

Send coupon for your free test. Send it Now! . . . no obligation.



MAIL THIS COUPON TODAY!

MULTI-CLEAN PRODUCTS, INC.

2277 Ford Parkway, Dept. NS-35, St. Paul 1, Minnesota.

Gentlemen: Sure, I'd like a free test for my floors and more information on Super Safety Cleaner with HCP. I understand this puts me under no obligation.

Name _____

Address _____

City _____ Zone _____ State _____

What's New ...

Vending Machine for Ice Cream Products

Time and money can be saved in the handling of ice cream for service to pupils with the new FHC Venders. Special freezers, storage facilities and servicing and clean-up work are eliminated with the new units which can be placed out of the way of the busy cafeteria lines. The venders are installed and serviced without cost to the school and can be used to supply ice cream at special meetings and other events as well as



during lunch periods. Strategically placed, they can prove to be a source of extra income to the institution. Fred Hebel Corporation, Addison, Ill.

For more details circle #910 on mailing card.

Kompakt File Cabinet Gives Added Space in Same Area

A new file cabinet which provides five drawers of filing space in the same space usually occupied by a four drawer file is offered in the Kompakt. Modern styling is combined with increased capacity in the new units. The drawers float open easily and the Kompakt is constructed for long life. Recessed drawer pulls, offset label holders, rounded corners and Gray-rite finish are features of this efficiently designed unit. The file is also available in three, four, and six drawer sizes. Remington Rand Inc., 315 Fourth Ave., New York 10.

For more details circle #911 on mailing card.

Vegetable Attachment for Electric Meat Chopper

One electric meat chopper can do the work of six separate machines with the new Shredder-Grater Attachment. In a matter of seconds a specially designed head with five different snap-on cutting cones can be put on in place of the regular meat chopper head, creating a chopper that also shreds, grates, thin slices, thick slices and strings. Stain resistant tempered steel cutting parts stay sharp indefinitely. General Slicing Machine Co., Inc., Walden, N.Y.

For more details circle #912 on mailing card.

Folding Table Leg Designed for Seating Comfort

Extra seating comfort and convenience are provided in the new Contour Comfort



Folding Tables. Seating capacity for study or food service is increased by the new design since knee and leg room at table ends is not restricted. Special hinges on legs and braces give sturdy, firm support to the table.

This addition to the line of Luxwood All-Purpose folding tables is available in four models. Hardwood plywood tops in either blond or walnut finish, hardboard top in walnut with blond trim, and a plastic top in standard and special colors provide a table to suit any decorative plan. The Auto-Magic locking device is simple to operate and holds legs securely against accidental release. Matching "comfort width" benches are available for use with the tables when they are set up in cafeterias and similar areas. The James P. Luxem Co., 3353 N. Lincoln St., Franklin Park, Ill.

For more details circle #913 on mailing card.

HAIRPINLINE COLD CATHODE



LOW BRIGHTNESS — LONG LIFE

1. Cold Cathode is designed to outlast all other lamps 5 to 1.
2. Low-brightness lamp eliminates louvers.
3. Eliminates vacuum-cleaner cleaning of fixtures.
4. Eliminates scrubbing of louvers.
5. Eliminates continuous lamp changing.
6. Three-year unconditional lamp guarantee against burnouts.

SEND FOR FREE COPY OF OUR BOOKLET

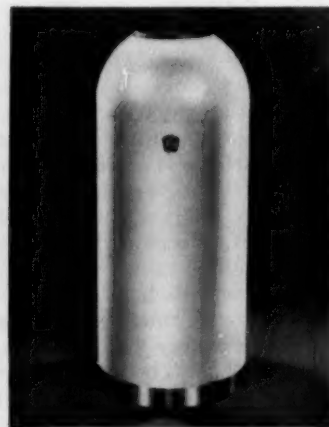
FACTS ABOUT COLD CATHODE FOR SCHOOL LIGHTING

ILLUMINATING ENGINEERING COMPANY

2347 E. NINE MILE ROAD, HAZEL PARK, MICHIGAN

Drop-In Waste Receptacle Has Unobstructed Opening

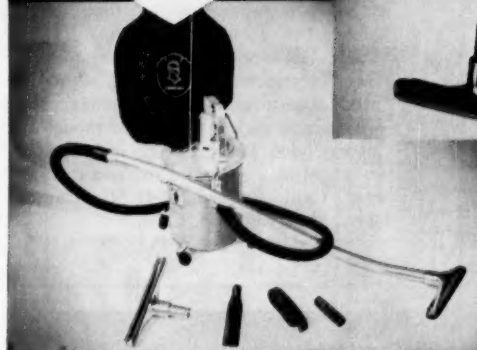
All around accessibility and fast deposit of refuse are features of the new Bennett Drop-in Waste Receptacle. Moving parts,



breakage and adjustments are eliminated as waste is dropped in the unobstructed top opening. The receptacle is complete with full size, watertight galvanized liner which is equipped with a convenient, full swing handle for fast emptying. The Bennett Mfg. Co., Alden, N.Y.

For more details circle #914 on mailing card.
(Continued on page 220)

**CHURCHILL'S
M-98
VACUUM
WET & DRY
PICKUP**

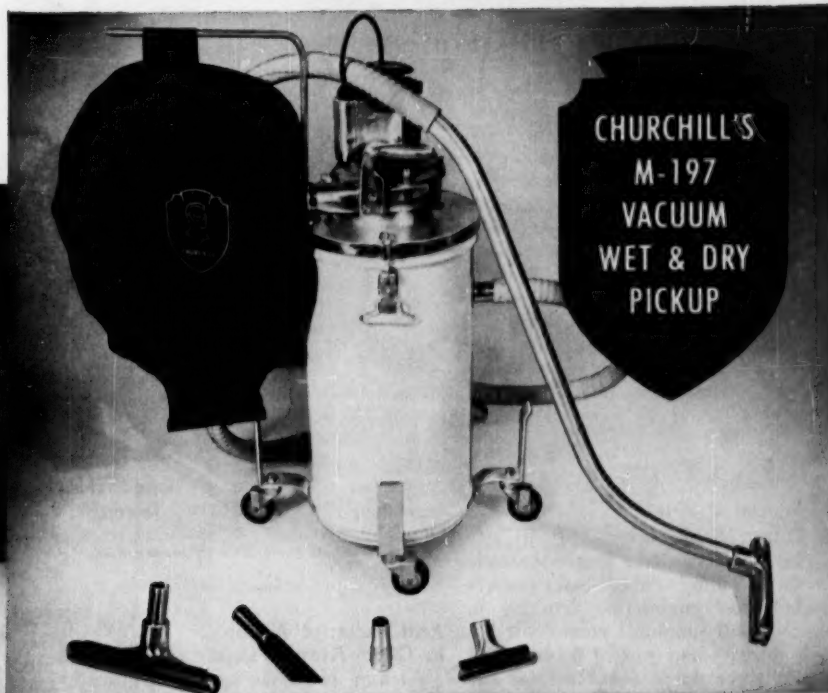


A smaller unit with the same proportionate ability and value as Churchill's M-197. Has $\frac{1}{2}$ h.p. motor, filter area of 528 sq. in., volume of 165 cu. ft. per min., tank capacity of 5 gallons. Standard equipment includes all attachments shown. Amazingly low in both first cost and operating cost. Many schools buy one for each floor or section of the building.



CHURCHILL'S 24" DRY MOP... an excellent accessory (extra) for dry sweeping. Works with either M-197 or M-98. Made with replaceable flannel covering over foam rubber and wood shoe which is fastened to aluminum top plate. Furnished complete with pair of extra heads which are removable and washable.

**CHURCHILL'S
M-197
VACUUM
WET & DRY
PICKUP**



**Designed Especially for Schools
... to assure
cleaner, more sanitary floors
At Amazingly Low Costs**

Here's a valuable addition to any school's maintenance equipment... a powerful, all-purpose unit which can be used for either wet or dry cleaning without interruption. Strong suction removes dirt, lint, metal and other dry matter... water and other liquids. Also convertible for use of exhaust in blowing dirt from surfaces which cannot be vacuum cleaned.

Ball bearing casters, set out from the container, make the entire unit very stable and easily portable. Equipped with 1 h.p. Universal type air cooled motor and sealed ball bearings. Bag area, 1504 sq. inches; tank capacity, 15 gallons. Furnished complete with the following attachments to take care of every ordinary cleaning requirement: 12" squeegee, 12" floor tool, 6" upholstery tool, crevice tool, adapter, 2 wands, 2-section hose, bag, heavy-duty rubber covered cord with unbreakable rubber plugs.

Yes, Churchill's M-197 is the vacuum pickup you need... and it can save considerably on maintenance costs. It will match the performance of any of the more expensive machines, yet the *original cost is only about half!* In other words, you can buy two of these Churchill units for very little more than you would pay for one competitor of equal capacity and ability. For complete information and prices, call your Churchill distributor or representative, or write...

CHURCHILL MANUFACTURING COMPANY, GALESBURG, ILL.

What's New ...

Sewing Machine Accessory Permits Decorative Stitching

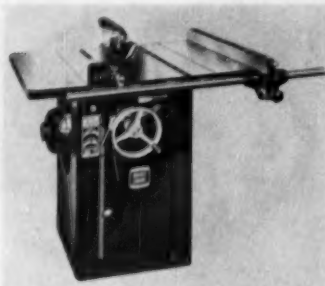
Completely automatic decorative stitching can now be done on all Slant-Needle Singer Sewing Machines and on most straight-needle models with the new Automatic Zigzagger. The device is available with a number of stitch patterns which are slipped into it to produce the desired result. Intricate stitches or combinations of stitches are possible with no special training when the Zigzagger is used. The attachment is easily put in place and accurate straight stitching can be done, without removing the Zigzagger, by flicking a switch. **Singer Sewing Machine Co., 149 Broadway, New York 6.**

For more details circle #915 on mailing card.

Simplified Control in Tilting Arbor Saw

The new Boice-Crane Master-Monotrol 10 inch Tilting Arbor Saw features machine tool engineering resulting in accuracy and simplified control. It has high capacity and rugged construction. Radically new design is incorporated into the single, super-sized "wedge-locked" front trunnion. Adjustable gibs maintain accuracy and smooth operation of the arbor carrier dovetailway. A single control wheel, called "Monotrol," handles

all adjustments necessary for the accomplishment of any cut. Time and effort



are saved with this feature. Extra power is provided by the new design resulting in more efficient production and elimination of accidents. The new saw incorporates all safety features. **Boice-Crane Company, 975 Central Ave., Toledo 6, Ohio.**

For more details circle #916 on mailing card.

Anti-Bacterial Action in Germ-Aseptic Liquid

Scientific protection against the growth of micro-organisms is offered in the new clear, odorless liquid known as Germ-Aseptic. It imparts anti-bacterial properties to surfaces and leaves residual protection until the next cleansing proc-

ess. It is effective in sanitizing floors, walls, rugs, tile, linoleum and sanitary facilities and provides anti-bacterial and anti-fungal treatment. It has no unpleasant odor and prevents the cause of malodors by removing bacteria.

Germ-Aseptic has passed the United States Government specifications for mildew proofing tests, according to the manufacturer. Surfaces treated with Germ-Aseptic are said to resist mildew, rot and musty odors. There is no soap scum, rinsing after use is not necessary, and no additional cleansing agents are required. **Germicidal Corp. of America, 41 E. 42nd St., New York 17.**

For more details circle #917 on mailing card.

Transcription Player Features Improved Operation

Four speeds, separate treble and bass controls, scratch filter for noisy records and built-in stroboscope are among the many new innovations featured in the Model 16VP2-5 transcription player. These features are in addition to G.E. variable reluctance cartridge, adjustable needle pressure and indestructible nylon wrist-action pickup. The new model has an extended range twelve inch speaker mounted in a grey and maroon carrying case. **Califone Corp., 1041 N. Sycamore Ave., Hollywood 38, Calif.**

For more details circle #918 on mailing card.

(Continued on page 222)

CORONET FILMS

proudly presents

the newest and finest in educational films!

Here are eight practical teaching tools . . . eight more good reasons why Coronet films are acknowledged as the *newest and finest* in educational films.

In all, there are nearly 600 Coronet films available for your use—in black-and-white or color . . . in every subject area . . . at every grade level. Each has been skillfully created in close collaboration with nationally recognized subject-matter specialists to insure its educational authenticity.

THE GRASSHOPPER: A Typical Insect (½ reel) explores the body structure and life cycle of this common insect. For science classes at the intermediate level.

THE BUTTERFLY (Life Cycle of an Insect) (½ reel) examines the Monarch butterfly as an example of the scaly-winged insects. For science classes at the intermediate level.

THE HONEYBEE: A Social Insect (½ reel) stresses the highly developed social organization of the hive, the bee's life cycle and value to man. For science classes at the intermediate level.

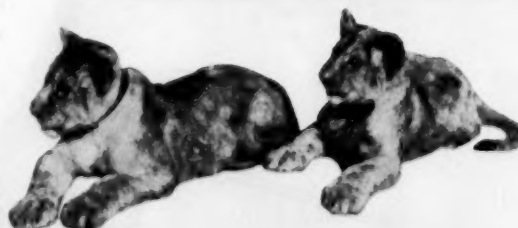
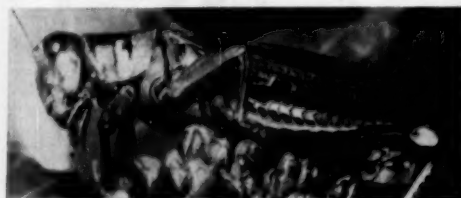
AIR ALL ABOUT US (Exploring Science) (1 reel) introduces pupils to the basic concepts of the physics of air and its use to man. For science classes at the intermediate level.

BEGINNING SWIMMING (1 reel) demonstrates basic techniques involved in kicking, breathing, floating, paddling and stroking. For health and swimming classes at the intermediate level.

PAPER AND PULP MAKING (1 reel) follows the methods involved in the conversion of wood into pulp and pulp into paper. For social studies classes at the intermediate level.

ZOO BABIES (Observing Things About Us) (1 reel) directs attention to the physical characteristics and habits of zoo animals and their offspring. For science studies at the primary level.

SPRING IS AN ADVENTURE (1 reel) records many of the exciting changes in trees, flowers, birds and animals which come with spring. For science studies at the primary level.



For information on how you may rent or purchase Coronet films, write to:

CORONET FILMS

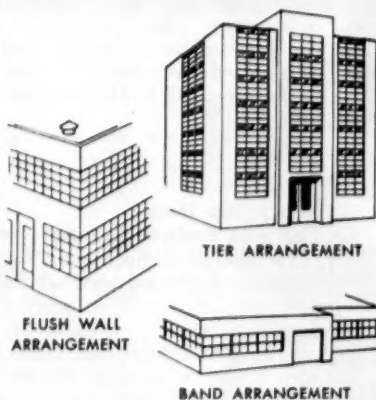
Department NS-355 • Coronet Building • Chicago 1, Illinois

Where the *other* services also count—it's always **BAYLEY WINDOWS**



Elementary School, Baxley, Ohio
Sims, Cornelius & Schooley, Archt., Columbus, Ohio
Altman Coady Company, Contr., Columbus, Ohio

Bayley Projected Windows IN PANEL WALL ARRANGEMENTS Meet A Modern Trend



Without the costliness of special window designing you can now execute many of your design treatments in modern panel-wall or "skin" construction. With Bayley sub-frame design, which accommodates separate window units, standard Bayley Aluminum Projected Windows (with channel frames) of any standard size can be used—offering wide flexibility in the use of newer panel decorating materials, plus the desired window area for providing maximum air, light and vision.

75 Years of
RELIABILITY



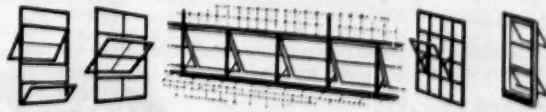
Bayley Projected Windows provide the modern school with better ventilation, vision and natural daylighting

The "better-serve" policy that, for so many years, has keynoted Bayley's client relationship is readily apparent in numerous ways. Constant improvement in product detail and quality is one. Another is exemplified in the Bayley Aluminum Projected Window (offered also in steel) that was designed to provide the window features requested by school authorities. Such features as:

Modern appearance • Economy—painting unnecessary • Permanence — long carefree life • Simplicity — no complicated mechanism • Adaptable to all types of construction • Glazing outside — flat surface inside • Easily washed from inside • Prepared for screens • Permits use of accessories, such as draperies, shades, curtains, venetian blinds or awnings.

Whatever your window requirement may be, Bayley's years of specialized window experience can undoubtedly be of value to you. Write or phone.

See Bayley in Sweet's. Complete catalogs on aluminum windows, 16a/Bay; steel windows, 16b/Ba.



PROJECTED PIVOTED

RIBBON

GUARD PSYCHIATRIC

THE WILLIAM BAYLEY COMPANY

Springfield, Ohio

District Sales Offices:

Springfield

Chicago 2

New York 17

Washington 16

This is the secret of DUDLEY'S extra security



The unique design of the Dudley Master Key baffles even locksmiths! This key has a twisting, inside channel, instead of the serrated edge that lines up tumblers in ordinary locks. It's impossible for a locksmith to cut this inside channel on standard, commercial key-cutting machinery.

You can get a duplicate only from Dudley... and only then after absolute proof of authority. Dudley registers and protects the pattern of every Master Key issued. Can be set up for both locks shown when used together. Write for Catalog Folder with the complete story.

DUDLEY Lock Corporation

DEPT. 310, CRYSTAL LAKE, ILLINOIS



P-570—finest Master-Keyed combination padlock made.



S-540—the built-in, Master-Keyed combination locker lock with 15-second combination change.

What's New...

Purified Water Available at Low Cost

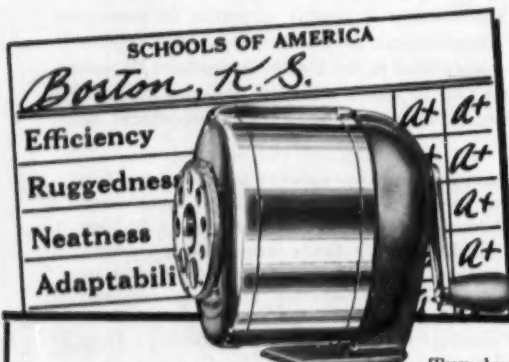
The new Ion-Mizer cabinet type demineralizer provides a unit which will produce water meeting U.S.P. XIV requirements for purified water at an approximate cost of three cents per gallon, according to the manufacturer. The unit employs a rechargeable resin ion ex-



changer in self-contained returnable plastic cells. When recharging is necessary a built-in signal light is activated.

The demineralizer has a capacity up to 200 gallons per hour and connects directly to the city water line. The cabinet is of sturdy metal construction, with built-in water valve, stainless steel sink and top and plastic discharge gooseneck. Labline, Inc., 217 N. Desplains St., Chicago 6.

For more details circle #919 on mailing card.

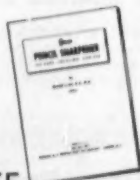


GOOD REPORT

THE classroom is the practical testing laboratory for a school pencil sharpener. The experienced educator knows the marks of an excellent sharpener as well as those of an excellent student.

It is the combination of quality and ability—found to the nth degree in BOSTON KS—that has led so many educators... for so many years... to specify BOSTON.

- EFFICIENT—30 hard-steel deep-milled BOSTON SPEED CUTTERS cut swiftly and neatly; the BOSTON pencil stop prevents waste.
- RUGGED—non-destructible die-cast frame... and steel rack and cutters... are student-proof against abuse.
- NEAT—distinctive new gray finish blends with any classroom.
- ADAPTABLE—snap guide fits eight sizes of pencils.
- Guaranteed for 1 year.



FREE

Non-advertising SCHOOL REPORT BOOK on pencil sharpener care, selection and use in schools.

C. HOWARD HUNT PEN CO.
Camden 1, N.J.

Also manufacturers of SPEEDBALL pens and products

BOSTON PENCIL SHARPENERS

Study Top Desk Features Positive Support

The No. 780 Airliner Study Top Desk features a hardwood plywood desk top measuring 23½ by 17½ inches, a comfortable curved plywood seat and back and a roomy tubular steel frame. Positive support is provided by the front legs of the desk which extend from the desk top to the floor. The Airliner Study Top Desk is available in five metal and two wood finishes, with desk tops of GE Textolite if desired. Griggs Equipment Co., Box 630, Belton, Texas.

For more details circle #920 on mailing card.

Floor Cleaning Machine Combines Speed With Power

Speed and power are combined in the new Lincoln Jet, making it especially suitable for all types of institutional cleaning. Simultaneous wet and dry pick-up without changing internal parts is possible with this all-purpose vacuum cleaner. Other features of the Jet include extra large filter bag, easy-open lid clamps, rust resistant twelve or fifty gallon capacity tank, easy-rolling, self-lubricating rubber casters and self-lubricating continuous duty by-pass motor. Lincoln-Schlueter Floor Machinery Co., 1250 W. Van Buren St., Chicago 7.

For more details circle #921 on mailing card.
(Continued on page 226)



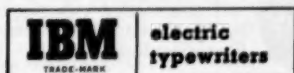
**With IBM Electrics your students learn typing
better, faster, easier . . . at lower per-student cost**

One out of every five office typewriters bought today is electric—that's why more and more schools are preparing their students for modern business on IBM Electric Typewriters. Schools find that students type faster and more accurately on *any* typewriter—even manual—when trained on IBM Electrics. Teaching typing is easier, too, and more students can be trained faster. IBM Electrics give longer service, save schools

money. And IBM provides the most complete installation, training, and maintenance service.

**Farsighted schools teach
with IBM Electrics!**

Girard High School, Girard, Ohio, finds that IBM Electrics last longer, give best results in student proficiency and teacher efficiency. Join the leaders with IBM Electrics—the teaching typewriter.



. . . outsell all other electrics combined!

Unsurpassed Educational Tool CENTRAL CONTROL ALL-FACILITY SCHOOL SOUND SYSTEM



MODEL
5214

Rauland

VERSATILE DUAL-CHANNEL SYSTEM

Here, at minimum cost, is the complete answer to administrative problems. This All-Facility Console distributes administrative information instantly for up to a total of 40 classrooms; feeds microphone, radio and phono programs to any or all rooms, and provides 2-way conversation between any room and central control Console. Includes every modern feature to enhance instruction and improve administration.

Your choice of every desirable program facility

1 SWITCH PANEL

Selects any or all rooms (available with up to 40 room capacity). Distributes any 2 programs; selects communication and room-return.

3 PROGRAM PANEL

Selects and distributes any of 2 microphones (one at Console and one remote), Radio or Phonograph.

5 ALL-CALL SWITCH

An Emergency and All-Call feature—Instantly connects all rooms to receive programs or instructions.

2 FM-AM RADIO

Selects any radio program on the complete FM band or the entire AM standard Broadcast band for distribution to any or all rooms.

4 INTERCOM

This panel serves as the second program panel and as the intercom panel permitting 2-way conversation with any room.

6 RECORD CHANGER

Highest quality Automatic Changer plays records of all sizes and all speeds.

This System is also available in 5114 Console model, less desk. Write for full descriptive details covering these quality-built, ultra-modern systems.

RAULAND-BORG CORPORATION

Rauland-Borg Corporation
3515-N West Addison St., Chicago 18, Ill.

Send full details on RAULAND School Sound Systems.

We have classrooms; auditorium seats.....

Name Title

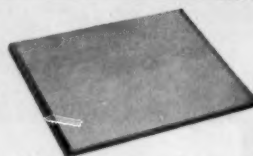
School.....

Address.....

City.....Zone.....State.....



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Why
MAYLINE Products
Are Better!

1. High grade materials used
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See these products displayed
AASA Conventions

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C-7702 Art Table

Symbol of  Superiority



C-7703B Drafting Table

MAYLINE COMPANY

631 No. Commerce St.
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MAYLINE



5000
school officials
were right!

about the
all-steel Atlas...

The ideal school
pencil sharpener.
More than five-
thousand school
officials asked for and
received:

DURABILITY:
all-steel, even the
receptable.

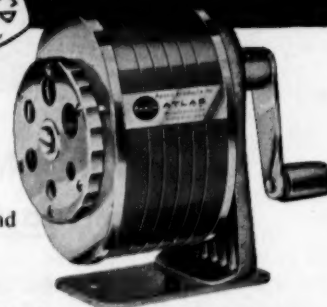
DEPENDABILITY; perfect point every time.
EASY-TO-SERVICE; can be completely dis-
assembled without removal of base from permanent
installation. **APPEARANCE;** designed to har-
monize with today's modern school construction.
PRICE; low enough to allow adequate installations
to meet all school requirements.

Write or see your Apsco dealer today!



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Classroom and corridor of Heathcote School, Scarsdale, N.Y.
Architects and Engineers: Perkins & Will
General Contractor: Arthur D. Stolle-Deval Corporation
Acousti-Celotex Contractor: Jacobson & Company, New York City

Pioneering School Planning Includes Pattern for QUIET Throughout

A milestone in school architecture, the Heathcote School of Scarsdale, N. Y., is a Citizens' Committee's dream come true: Little-schoolhouse atmosphere . . . ultra-modern facilities . . . rare economy. Small wonder, with its advanced design, that the architects selected Acousti-Celotex Sound Conditioning for every classroom and corridor of this unusual school. The resulting *quiet comfort* promotes better hearing, better study habits for young minds . . . checks disturbing clatter in halls and rooms . . . helps both students and teachers to progress.

Low-Cost Answer—A sound-absorbing ceiling of Acousti-Celotex Tile keeps noise levels of conversation, traffic, routine schoolday activity at a minimum. At Heathcote, ceilings of Acousti-Celotex Tile bring near-

perfect acoustics to auditorium, gymnasium, shops, art rooms, library, to all study and play areas.

Easily Maintained—Acousti-Celotex Tile is quickly installed in existing buildings or during new construction, requires no special maintenance thereafter. Of high sound-absorption value, it presents a beautiful surface that can be washed *repeatedly* and painted *repeatedly* without impairing its sound-absorbing efficiency.

Mail Coupon Today for a Sound Conditioning Survey Chart that will bring you a free analysis of the noise and acoustical problems in your school, plus a free factual booklet, "Sound Conditioning for Schools and Colleges." There is no obligation.

ACOUSTI-CELOTEX

REGISTERED

U. S. PAT. OFF.

Sound Conditioning



TRADE MARK

Products for Every Sound Conditioning Problem—The Celotex Corporation, 120 S. LaSalle St., Chicago 3, Illinois. In Canada: Dominion Sound Equipments, Limited, Montreal, Quebec.

Vol. 55, No. 3, March 1955

MAIL NOW!

The Celotex Corporation, Dept. M-35
120 S. LaSalle St., Chicago 3, Illinois

Without cost or obligation, please send me the Acousti-Celotex Sound Conditioning Survey Chart, and your booklet, "Sound Conditioning for Schools and Colleges."

Name _____ Title _____

Address _____

City _____ Zone _____ State _____

What's New...

Product Literature

- "How to Make and Submit Prize-Winning Pictures," "Selecting and Preparing Pictures for Publication" and "Glossary of Important Photographic and Photo-Editing Words" are the titles of three fact sheets available from Eastman Kodak Company, Rochester 4, N.Y. They have been prepared to help high school students and teachers in connection with the 1955 National High School Photographic Awards.

For more details circle #922 on mailing card.

- The new Korelock prefinished hollow-core ceiling and wall paneling is discussed in a folder released by Marsh Wall Products, Inc., Dover, Ohio. Photographs show typical Korelock interiors, both in new construction and remodeling. Also shown are the ten "Companion Colors" and the four wood patterns styled by Raymond Loewy Associates especially for Korelock.

For more details circle #923 on mailing card.

- The 1955 catalog on Flexicore Precast Prestressed Concrete Slabs for Floors and Roofs has been released by The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio. The eight page catalog outlines properties and uses of the slabs, diagrams basic structural and mechanical details and describes erection procedure.

For more details circle #924 on mailing card.

- The Vari-Vac temperature control system, an automatic heating control for schools, is discussed in a new booklet released by C. A. Dunham Co., 400 W. Madison St., Chicago 6. The eight page, two color booklet contains photos, drawings and technical data on the system and case studies of schools now using Vari-Vac controls.

For more details circle #925 on mailing card.

- How motorists in school areas can be controlled even when patrols are not on the streets is discussed in a folder issued by Zonealarm Corporation, 712 E. 163rd St., Cleveland 10, Ohio. Headed, "Protect Your School Age Children With Zonealarm Critical Area Audible Alarm Systems," the folder gives descriptive information on the system and its operation.

For more details circle #926 on mailing card.

- Catalog No. 675, released by The National Radiator Co., Johnstown, Pa., describes National commercial steel boilers with Wing induced draft fans. The eight page catalog is illustrated and gives specific examples where Wing induced draft fans are particularly advantageous.

For more details circle #927 on mailing card.

- A catalog illustrating and describing the company's four series of fluorescent and slimline units has been released by The Wiremold Co., Hartford 10, Conn.

(Continued on page 228)

Entitled "Wiremold Fluorescent Lighting Fixtures and Fittings," the three color catalog also gives suggested applications for the units.

For more details circle #928 on mailing card.

- A folder which will be helpful to architects, engineers and consumers has been announced by the Corrugulux Div. of Libbey-Owens-Ford Glass Co., P. O. Box 20026, Houston 25, Texas. Entitled "What to Look for in a Good Translucent Building Panel," the new folder contains an outline of product standards for translucent fiber glass-reinforced panels.

For more details circle #929 on mailing card.

- A comprehensive catalog covering its full line of custom made laboratory glassware is available from Corning Glass Works, Corning, N.Y. Catalog No. CA-1 is fully indexed, each piece of "Pyrex" brand laboratory glassware being listed alphabetically for easy reference. Illustrations supplement the descriptive text.

For more details circle #930 on mailing card.

- Bulletin AD-139 describing the wide use of and listing the many advantages of Hev-E-Oil burners has been announced by Cleaver-Brooks Co., 326 E. Keefe Ave., Milwaukee 12, Wis. The four page, two color illustrated bulletin lists 375 representative Hev-E-Oil burner school installations.

For more details circle #931 on mailing card.

Low Cost Multi-Purpose Rooms with Engineered Timber Construction

You are looking at a wise school investment. This multi-purpose room has no posts or bearing partitions, so is adaptable for a gymnasium, auditorium, cafeteria, library or classroom. Yet both initial and upkeep costs are gratifyingly low, and heavy timber beams are unexcelled for safety and effective resistance to destruction by fire.

For information about the permanence and economy of engineered timber construction of modern school plants, see your nearest Timber Structures representative, or write us for the informative booklet, "Modern, Functional Schools." It may well help you make a significant saving in the cost of your new school buildings.



Multi-purpose room of Lakeland Elementary School, Redondo, Washington, is 56' x 87', with glulam timber beams eliminating the necessity of bearing partitions. Architect was John W. Maloney, Seattle.

TIMBER STRUCTURES, INC.

P. O. Box 3782-H, Portland 8, Oregon

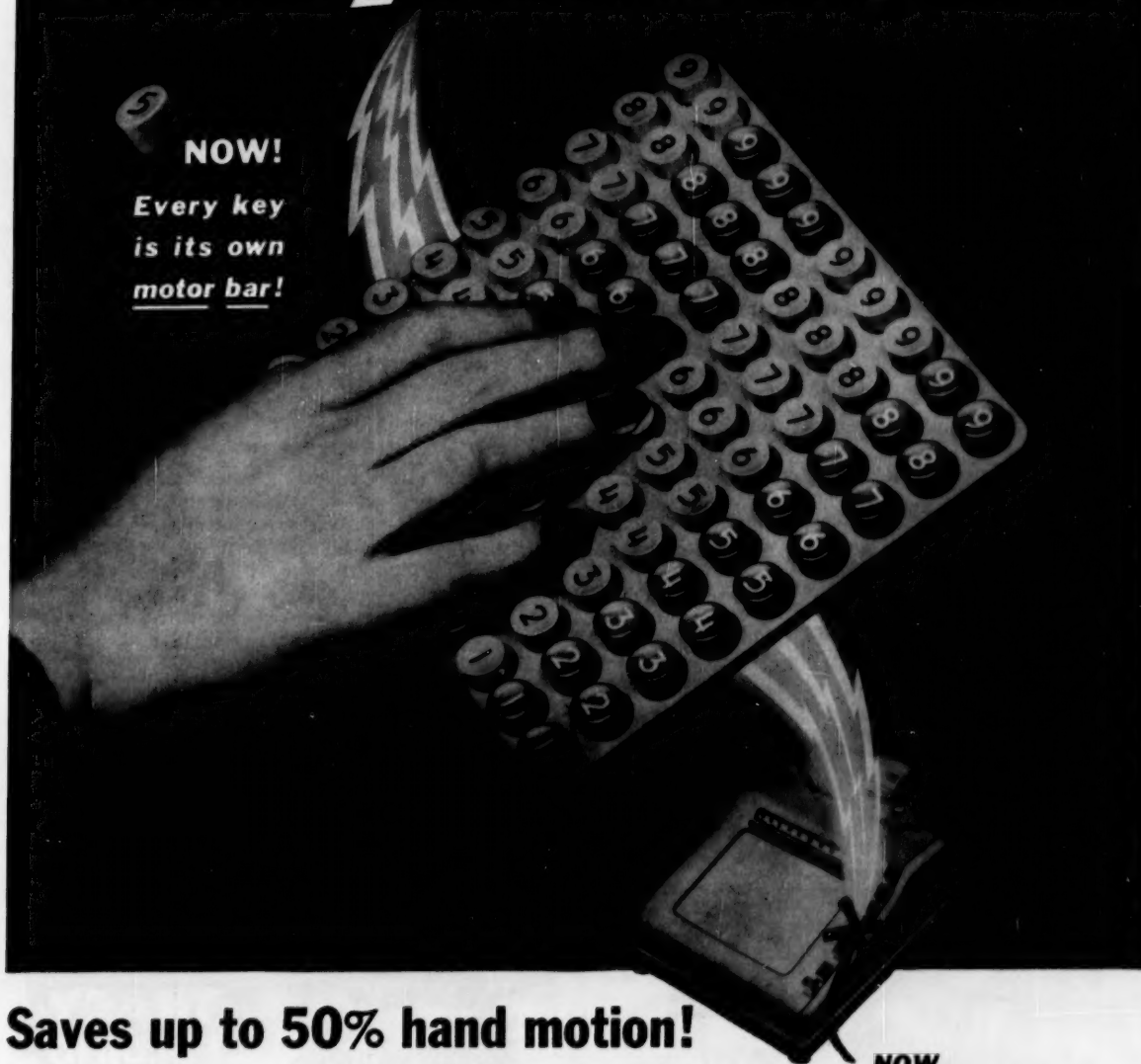
Offices in Ramsey, N. J.; Garden City, N. Y.; Chicago; Ferndale, Mich.; Kansas City; St. Louis; Minneapolis; Boston; Columbus; Des Moines; Decatur; Wichita; Dallas; Houston; Birmingham; Charlotte; Memphis; West Hartford; Seattle; Spokane; Denver.

TIMBER STRUCTURES, INC. OF CALIFORNIA • Richmond, California
Local Representatives throughout the United States and Canada

National *LIVE* KEYBOARD adding machine

NOW!

Every key
is its own
motor bar!



Saves up to 50% hand motion!

Now you can list and add *without touching a motor bar!* 50% less hand travel—a great saving of effort for operators. No wonder they like it!

Amounts are added and printed the instant they are set on the keyboard—because *every key is electrified!* No more “back and forth” motion from keyboard to motor bar—because *every key is also a motor bar.* The only completely electrified Adding Machine!

National's “feather-touch” action makes it easier than ever to press combinations of keys at one time—more time-and-effort-saving!

All ciphers print automatically—still more effort and time saved! At the end of the day operators feel fresher—and

they have accomplished more with less effort.

The National Adding Machine gives you “Live” Keyboard *plus* 8 other time-saving features *combined only on National:* Automatic Clear Signal . . . Subtractions in **red** . . . Automatic Credit Balance in **red** . . . Automatic space-up of tape to tear-off line when total prints . . . Large Answer Dials . . . Easy-touch Key action . . . Full-Visible Keyboard . . . Rugged-Duty Construction in compact size for desk use.

One hour a day saved with this *exclusively National* combination of features will repay the entire cost of a National Adding Machine every year—an annual return of 100%.

NOW

you can forget the motor bar!

Don't buy any adding machine until you see this National! Printed words cannot explain all the ways this remarkable National saves operator effort, saves time, saves money. You must see it to believe it. For a demonstration phone the nearest National office or National dealer. See it today!

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9 OHIO
949 OFFICES IN 94 COUNTRIES



What's New...

• A portfolio of the ten catalog sections of lighting equipment which have been introduced by The F. W. Wakefield Brass Company, Vermilion, Ohio, is now available. Brevity of copy covering the modern, efficient fixtures is supplemented with effective drawings. The catalogs cover the Wakefield Ceiling and the full line of modular lighting equipment developed by the company.

For more details circle #932 on mailing card.

• A new catalog covering Electric Clock Systems has been released by Sperti Faraday Inc., Adrian, Mich. The eight page catalog describes four of their latest electric clock systems, series 100, 200, 300 and 400. The catalog is fully illustrated.

For more details circle #933 on mailing card.

• The third catalog of Armed Forces 16 mm. films is available from the Department of Defense, Office of Public Information, Washington 25, D. C. The Army, Navy, Air Force and Marine Corps sections of the catalog list a total of 251 films. Sections on Armed Forces Information and Education and civil defense films have also been included.

For more details circle #934 on mailing card.

• Bulletin 54-7A describing Zurn Systems for the Modern Kitchen has been released by J. A. Zurn Mfg. Co., Plumbing Div., Erie, Pa. The 4 page bulletin

shows how the system supports every kitchen fixture off the floor, allowing quick and easy kitchen maintenance. A section on Zurn grease interceptors, "Greaseptors," is also included along with a section on floor drains recommended for kitchens.

For more details circle #935 on mailing card.

• The story of the Heat Recorder-Totalizer for the efficient operation of any heating system is told in a folder released by the Heat-Timer Corporation, 657 Broadway, New York 12. How the Time Totalizer computes and registers the total hours of burner operation, and the automatic record of the operations of the heating system recorded on tape are discussed in the folder. Continuous supervision is afforded by the instrument which is easily installed in any heating system and effects savings in fuel and labor.

For more details circle #936 on mailing card.

• An attractive, colorful catalog of Sifo Educational Toys is available from the Sifo Company, 353 Rosabel St., St. Paul 1, Minn. The 40 page booklet is margin-indexed for quick reference to toys for varying age groups and has many pages printed in full color. It includes full descriptive information on these attractive, durable educational toys with each one pictured.

For more details circle #937 on mailing card.

• All Yale key blanks and locksmiths' supplies and tools are covered in the new Locksmith Supply Catalog section issued by Yale & Towne Manufacturing Co., Stamford, Conn. The 32 page book contains comprehensive indices to key blanks, a section on repair parts and a section on repair tools and key duplicating machines. It should prove of value to maintenance departments and engineers.

For more details circle #938 on mailing card.

• How the Shelleymatic Speed Cooler operates to keep dairy products always within reach of pupils, without stretch or strain, is told in a new folder available from Central Supply Co., 210 S. Capitol Ave., Indianapolis, Ind. Manufactured by Shelley Manufacturing Co., the coolers are designed especially for all types of school cafeteria installations and can be easily incorporated into any cafeteria counter. They are completely automatic, keeping milk always within easy reach.

For more details circle #939 on mailing card.

• A complete and concise record of washroom maintenance is available in the Washroom Survey Cards brought out by Bobrick Dispensers, Inc., 1214 Nstrand Ave., Brooklyn 25, N.Y. The pocket-size cards list all the items in the washrooms and simplify inspection and follow-up of maintenance.

For more details circle #940 on mailing card.

(Continued on page 230)



**WORN STAIRS
ARE YOUR
NO. 1
DANGER
SPOT!**

Make Them Safe With New Stairmaster Safety Treads

- Prevent accidents to children by the installation of Wooster's new aluminum Stairmaster Safety Treads over worn stairs. Installed in one day, usually without interrupting traffic, these durable metal treads minimize stair accidents and stop costly stairway maintenance. Used by hundreds of leading school systems. Send your overall stair measurements for a quotation.

FREE! 24-page safety manual shows how to make stairs and walkways safe.

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Its light weight and easy, one-man folding, makes the TRACY TABLE a time and energy saver for institutional set-ups like that above. Uniquely designed with ALL-STEEL frame and a hinged brace-beam that supports the top while firmly locking both pedestals, TRACY TABLES also set a new beauty standard. Offered in a choice of 3 beautiful FORMICA tops, or brown masonite Presdwood, TRACY'S smart design enhances any modern institutional decor.



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Premier D054 desk and chair sets are planned for flexible arrangement. Strong and rugged for long life, yet light for easy handling. Pressed steel frames with maple desk top and plywood chair seat. All steel book box. Six chair and desk heights.



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• "The A B C Plan for School Lighting" is the title of a new 20 page booklet issued by Westinghouse Electric Corporation, P. O. Box 2099, Pittsburgh 30, Pa. The revised booklet, B-4556-B, gives the basic requirements for school lighting systems and describes systems which meet these requirements. Alternative lighting plans are discussed with a tabulation of advantages and disadvantages.

For more details circle #941 on mailing card.

• Selection technics for storage batteries for stand-by power, emergency lighting and switchgear applications are discussed in a 20 page manual released by Exide Industrial Div., The Electric Storage Battery Co., Box 8109, Philadelphia 1, Pa. The manual, **Bulletin 210**, also includes a discussion of charging equipment and maintenance technics in addition to an illustrated section on storage battery installation procedures.

For more details circle #942 on mailing card.

• A colorful new catalog of forty-three 16 mm. feature films from the studios of the J. Arthur Rank Organization has been released by International Film Div., United World Films, Inc., 1445 Park Ave., New York 29. Among the films described in the catalog are "The Cruel Sea," "Genevieve," "The Lavender Hill Mob" and "Oliver Twist."

For more details circle #943 on mailing card.

• A complete index to all **Aerocor Insulations** is available in a new eight page booklet released by Owens-Corning Fiberglas Corp., Toledo 1, Ohio. Each type of insulation is illustrated and described under the headings of "Product Description," "Performance," "Suggested Use," "Application Methods" and "Sizes."

For more details circle #944 on mailing card.

• A new folder describing the **Solar Jet waste receptable** has been announced by Solar-Sturges Mfg. Div., Pressed Steel Car Co., Inc., Melrose Park, Ill. The three color folder contains sketches illustrating how the stainless steel dome top makes waste disposal possible from any direction. Advantages and dimensions of the two sizes available are given and there is a list of suggested locations for the waste receptable in institutions.

For more details circle #945 on mailing card.

• The story of "**Registered Safety Mirrors**" for installation in schools, hospitals and other institutions, is told in a folder issued by Tyre Bros. Glass and Paint Co., 3010 San Pedro St., Los Angeles 11, Calif. Particularly designed for institutional use in public rest rooms and other areas where mirrors are used, the mirrors are shatterproof, moisture resistant and durable. They have stainless steel frames and are easy to hang.

For more details circle #946 on mailing card.

• Bleachers used primarily for indoor spectator seating are described and illustrated in a new folder released by Berlin Chapman Co., Berlin, Wis. Entitled "**Mechanical Folding Bleachers**," the folder gives capacities and dimensions in addition to architects' specifications.

For more details circle #947 on mailing card.

• The 18th edition of **Post's catalog of 16 mm. sound films** has been released by Post Pictures Corp., 115 W. 45th St., New York 36. More than 250 titles are listed with short descriptions.

For more details circle #948 on mailing card.

• The fifth annual edition of the "**Annotable List Of Phonograph Records**" has been issued by the Children's Reading Service, 1078 St. John's Place, Brooklyn 13, N.Y. Edited by Warren S. Freeman, the 1955 catalog presents more than 1000 carefully chosen recordings from many record manufacturers, arranged by subject areas and grade groups. Recordings for square dancing, language arts, science and social studies suitable for kindergarten through senior high school and college level are included in addition to recordings for music understanding. A filmstrip section and a select group of books for the music educator and student are two new features of the catalog.

For more details circle #949 on mailing card.

(Continued on page 232)

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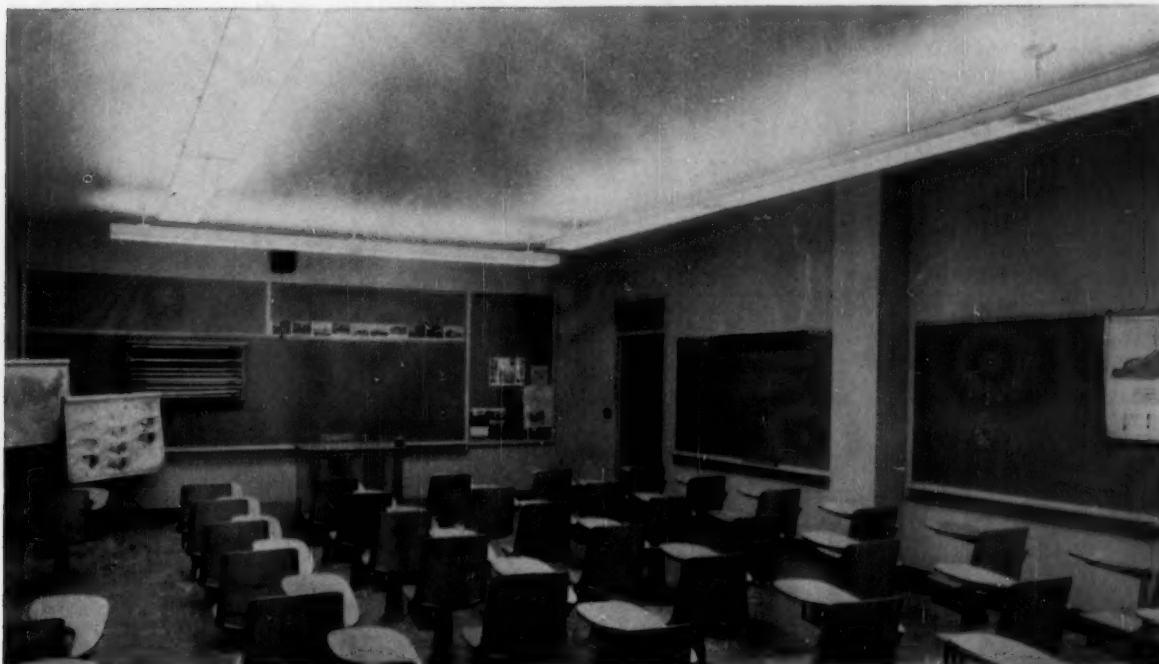
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March, 1955

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• "Skytrol Glass Blocks for Toplighting your Buildings" is the title of a new eight page catalog announced by Pittsburgh Corning Corp., 1 Gateway Center, Pittsburgh 22, Pa. Prepared as a reference manual for administrators, school planning committees, architects and engineers, the illustrated catalog contains information on physical performance, technical data on light transmission and insulation values, installation detail drawings and complete specifications.

For more details circle #950 on mailing card.

• A condensed but complete product guide for its entire line of high and low pressure steel boilers has been released by Kewanee-Ross Corp., Kewanee, Ill. in the revised edition of their **General Catalog, Number 80**, for 1955. The colorful 32 page catalog also contains full descriptions and illustrations of Kewanee water heating products. An index and tables make for easy reference.

For more details circle #951 on mailing card.

• The full story on **Vampco All-Aluminum Windows** is told in a 40 page catalog recently released by Valley Metal Products Company, Plainwell, Mich. Specifications, detail drawings, glazing data and other factual information is given together with illustrations showing construction processes as well as many schools and other buildings in which Vampco All-Aluminum Windows are installed.

For more details circle #952 on mailing card.

• The full line of arithmetic aids brought out by Creative Playthings, Inc., 5 University Place, New York 3, is discussed in a new thirty page guide brought out by the company. Entitled "**Arithmetic Tangibles**," the booklet is divided into groupings of readiness for number learning, number groupings, addition and subtraction, multiplication and division, fractions, number games, making your own materials and teaching aids.

For more details circle #953 on mailing card.

• The full line of **Arketex Ceramic Glazed Structural Tile** is discussed and illustrated in a new catalog recently released by The Arketex Ceramic Corp., Brazil, Ind. Typical installations are shown and construction details are given in this 28 page catalog.

For more details circle #954 on mailing card.

• A new report has been announced by The Asphalt Tile Institute, 101 Park Ave., New York 17, entitled "**Specifications for Cleaners for Use on Asphalt Tile Floors**." It was developed by the Institute's Technical Research Committee to cover the many new products in the maintenance field. It is designed to indicate not only all products that have an injurious effect on asphalt tile, but also those that will be irritating to the human skin.

For more details circle #955 on mailing card.

• "**Hard Vulcanized Fibre Trucks and Receptacles**" for efficient maintenance in institutions are described and illustrated in a new 12 page catalog issued by National Vulcanized Fibre Co., Wilmington 99, Del. Included is information on trucks for linens, laundry and waste disposal applications.

For more details circle #956 on mailing card.

• A helpful reference guide for everyone interested in electronics is to be found in the revised edition of "**A Dictionary of Electronic Terms**" announced by Allied Radio Corp., 100 N. Western Ave., Chicago 10. Over 3500 terms used in television, radio and industrial electronics are included along with over 150 illustrations and diagrams.

For more details circle #957 on mailing card.

• Projects for teaching machine shop practice are discussed in a new 104 page book published by South Bend Lathe Works, South Bend, Ind. Completely dimensional detail drawings for 34 projects ranging from simple but useful tools that can be made by a beginner to a full sized gasoline engine are contained in the book which also contains detailed lists of items required for each project. The book, "**34 Machine Shop Projects**," sells at \$2 per copy but special introductory prices are offered to shop instructors on sample copies or quantity orders.

For more details circle #958 on mailing card.

• Facts about air conditioning an entire building with individual packaged units are given in a brochure released by Philco Corp., Tioga & C Sts., Philadelphia 34, Pa. In addition to stating the advantages of such a system, a factual report is included which tells how a building was air conditioned with the individual packaged units and the results of the installation.

For more details circle #959 on mailing card.

• Some 2500 items used by hospitals, schools and other institutions are listed in the new 1955 catalog available from Clark Linen & Equipment Co., 303 W. Monroe St., Chicago 6. Items listed range in size from thread and key tags to complete room settings. Thirty-two of the catalog's 64 pages are in color and actual swatches of blankets are included.

For more details circle #960 on mailing card.

Film Releases

"Under the Surface," "The Schoolmaster," "Your Children Walking" and "Tsetse Fly," all 16 mm., sound, two reel films. **British Information Services**, 30 Rockefeller Plaza, New York, 20.

For more details circle #961 on mailing card.

"The Grasshopper: A Typical Insect," "The Butterfly," "The Honeybee: A Social Insect," "Air All About Us," "Beginning Swimming" and "Paper and Pulp Making," for intermediate grades, sound, color or black and white. "Zoo Babies"

and "Spring Is an Adventure," for primary grades, 1 reel, sound, color or black and white. **Coronet Films**, 65 E. South Water St., Chicago 1.

For more details circle #962 on mailing card.

"National Parks of the Southwest United States," "National Parks of the Northwest and Pacific Coast States," "Yellowstone National Park," "National Parks and Monuments of the Eastern United States" and "National Monuments of the Southwest United States," filmstrip series in color, captioned. **Society For Visual Education, Inc.**, 1345 Diversey Pkwy., Chicago 14.

For more details circle #963 on mailing card.

"A Family of India," "Why Study Science" and "Why Study Speech," all 16 mm. educational sound films for schools and colleges. **Young America Films, Inc.**, 18 E. 41st St., New York 17.

For more details circle #964 on mailing card.

Suppliers' News

Beaver-Advance Corporation is the new corporate name of the **Beaver Art Metal Corporation**, Ellwood City, Pa., designers and manufacturers of tubular steel scaffolding and materials hoisting towers.

Federal Fibre Corp., 3704 Tenth St., Long Island City 1, N.Y., manufacturer of Fiberok baskets, cans and receptacles and Fedco boxes and box trucks, announces appointment of **Philip Shore & Associates**, 2881 E. Pico Blvd., Los Angeles 23, Calif., as its representative on the West Coast.

McGraw-Hill Book Co., 330 W. 42nd St., New York 18, announces it has acquired all sales and distribution rights to the **Audio-Visual Division of Popular Science Publishing Co.**, exclusive of the Filmstrip-of-the-Month Clubs, which Popular Science will continue to operate. The entire list of some 460 Popular Science filmstrips and 85 Teach-O-Disc records will be incorporated into the offerings of the Text-Film Department of McGraw-Hill.

Pittsburgh Plate Glass Company, 632 Fort Duquesne Blvd., Pittsburgh 22, Pa., manufacturer of paints, glass, chemicals, brushes, plastics and fiber glass, announces the opening of a new modern structure housing the basic and applied research laboratories of the paint and brush division at Springdale, Pa. The new laboratory is "dedicated to the creation and experimental production of new chemical compounds, paints, varnishes, enamels and lacquers, resins and plastics."

Sico Manufacturing Co., Inc. is the new name of the company formerly known as **Seating Incorporated**, 6045 Pillsbury Ave. S., Minneapolis 19, Minn., manufacturer of Sico folding tables and seating equipment.

Wakefield Lighting: Flexible as Your Classrooms

is the title of a new 36-page booklet which will be of assistance to you when planning flexible classrooms, either new or remodeled.

If the classroom is to be flexible then the lighting that goes into it must be flexible too. With this thought in mind, Wakefield has prepared

a booklet which covers the subject of classroom flexibility in all its phases, with suitable emphasis on the role of lighting. Subjects covered include:

- The Concept of the Total Luminous Environment
- Vision and Learning
- Adaptation
- Task Lighting Needs
- Hemispherical vs. Spherical Light Distribution
- Reference Centers
- Orientation
- Typical Flexible Classrooms
- Flexible Multi-Function Ceilings
- Types of Lighting Units

The school administrator and architect will find here many ideas that will stimulate their own thinking on the ever present subject of

classroom flexibility. A copy of the booklet, recently off the press, will be mailed promptly upon receipt of a filled-in coupon.

THE F. W. WAKEFIELD BRASS COMPANY
VERMILION, OHIO

or

WAKEFIELD LIGHTING LIMITED
LONDON, ONTARIO, CANADA

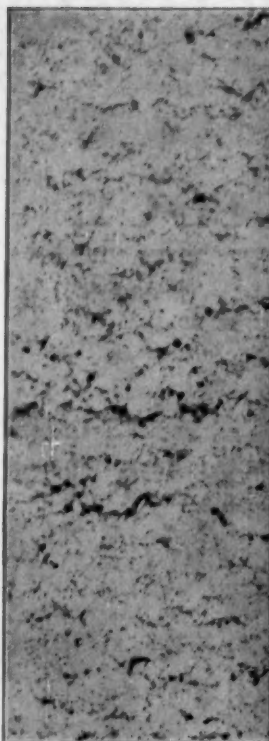
Please send me a copy of your new booklet, WAKEFIELD LIGHTING: Flexible as Your Classrooms.

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**Waverly Park School,
Lynbrook, L. I., N. Y.**

Architect:

Frederic P. Wiedersum

Acoustical Contractor:

Donaldson Acoustics Co.

Acoustical Material:

Armstrong Travertone



This noise-muffling ceiling gives extra protection

Sound conditioning with Armstrong Travertone® is doubly valuable to the Waverly Park School in Lynbrook, N. Y. Teachers and students are assured of the quiet needed for concentration and at the same time are given the added fire protection of an incombustible acoustical ceiling.

Made of mineral wool, Travertone is completely incombustible and meets the strictest fire safety regulations, lowering fire insurance rates.

Excellent noise absorber—The clatter and chatter of footsteps and voices pose no problem in this sound-conditioned school. Travertone's mineral wool fiber composition soaks up as much as 80% of the noise that strikes it.

Attractive ceiling material—Travertone's fissured surface has the smart appearance of travertine marble and blends well with almost any interior planning. Its two-coat white paint finish has

high light reflectivity. If desired, it can be repainted to match a particular color scheme.

Installation and upkeep are easy—Installed by conventional cementing or suspension methods, Travertone goes up quickly. Once up, a Travertone ceiling requires only occasional washing to keep it as bright and clean as new.

Get complete details on Travertone and the entire line of Armstrong sound-conditioning materials from your Armstrong Acoustical Contractor. For your free copy of the new 1955 edition of "Armstrong Acoustical Materials," write Armstrong Cork Company, 4203 Wabank Avenue, Lancaster, Pennsylvania.

Armstrong

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